Understanding HIV & AIDS

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In 1987, HAIN published the country's first booklet about HIV/AIDS in Filipino ("Mga Tanong at Sagot Tungkol sa AIDS). It took all of three years before we ran out of the 1000 copies that were printed. In 1994, we did a bi-lingual booklet called "Choose Life, Fight AIDS and ran out of the 12,000 copies within a few months. The booklet is now into its third printing; several non-government organizations have adapted the booklet for their own uses; and the title itself has been used by the Philippine Information Agency to ad vertise AIDS hotlines.

While public interest HIV/AIDS is now quite high, knowledge levels still leave much to be desired. Misinformation continues and may in fact have wors- ened as people are bombarded with messages that might even be contradic tory. In 1991, HAIN began a program to reach universities and colleges offer- ing health science courses, mainly medicine, nursing, midwifery. We first had workshops for students but later moved on to faculty members. We have learned much from the workshops, seeing how people over-estimate risks such as those of occupational exposure, while overlooking personal risks. We have seen how even physicians carry many misconceptions, often built out of social prejudice. But our workshops have shown that even deeply ingrained social bias can be overcome through dialogue and a respect for people. In many instances, all that was needed was an opportunity to look at the facts and to listen to each other.

This manual is one of the products of our workshops, featuring the most

common questions asked by participants. They reflect many of the concerns found among non-health professionals. We have been encouraged by the con cern people have not just about the medical aspects of HIV but also social, ethical and moral issues. The format of this manual reflects HAIN's own teach- ing philosophy, one which avoids fear tactics, sensationalism and dry technical lectures. Instead, we believe in an inter-active approach that draws on peo ple's own experiences and interests. Our workshops, which last two days, of- ten leave both staff and participants quite drained. Perhaps this is because HIV/AIDS raises many questions about our society and ourselves. We hope this manual will stimulate more critical thinking as we move away from sim plistic condom-based solutions toward models of community-based empower- ment.

owledge the assistance of the Australian Agency (AusAID), which has supported our training institutions and the printing of this primer.

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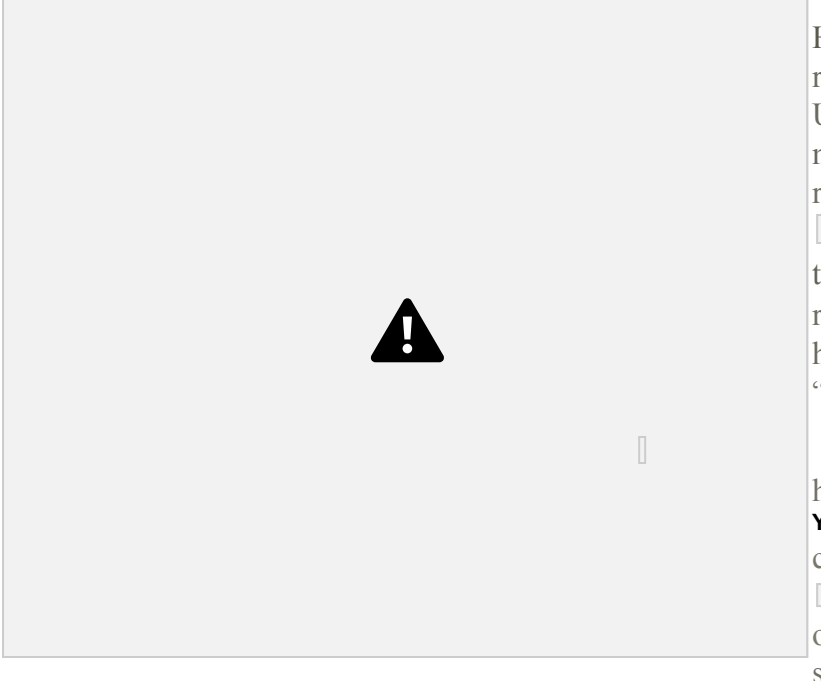
HIV?

HIV refers to the Human Immunodeficiency Virus, which causes AIDS. Earlier reports and published materials will have references to HTLV-3 (human T-cell leukemia virus-3),LAV (lymphadenopathy-associated virus) and ARV (AIDS-associated retroviruses). These names are no longer used since the international scientific and medical community has agreed to use one name: HIV.

There are two types of HIV. HIV-1 is the more common form found in most parts of the world while HIV-2 has been reported mainly in West Africa, some European countries, South America and India. Both types of HIV cause AIDS.

HIV-1 is divided into 10 subtypes (**A** to I and 0) while HIV-2 has five subtypes. In addition, there are different strains for each subtype. The virus mutates rapidly so that even within one infected individual, several strains co
exist. It is also possible for a person infected with one sub type to be infected again by another person with a differ ent HIV subtype.

What kind of a virus is HIV7



HIV is a retrovirus. Unlike many other living cells, retroviruses do not have DNA, the genetic material needed for reproduction. Retroviruses only have RNA and reproduce by "hijacking" the DNA of its host's cells. After entering these cells, HIV needs to convert its RNA into DNA, a reverse of the situation in other living **organ** isms. This is why they are called retroviruses. After this conver sion, HIV incorporates its DNA into the host cell's nucleus and then uses the cell to reproduce.

Module I: HIV and AI HIV belongs to a specific family of retroviruses called lentiviruses, sometimes referred to as “slow viruses”. With these slow viruses, the time between infection and the appearance of symptoms tends to be much longer, allow ing more opportunities for these microorganisms to be transmitted to other hosts.

Is there a difference between HIV infection and AIDS?

Where did *originate?*

We do not know. Although the first reports of a “new mystery disease” came from the United States in 1980, further research suggests that HIV/AIDS was probably already present in different parts of the world 30 or 40 years ago. In the 19809, increasing global travel and migration, rapid popula tion growth and urbanization created condi tions for the virus to spread swiftly.

Stories about the disease originating in a specific geographical area - Africa, Haiti or the United States - have never been scien tifically proven. Such stories are misleading and carry racist undertones.

When did

HIVIAIDS emerge in the Philippines?

Again, we do not know. The first reports of HIVIAIDS in the Philippines date back to 1984 and mainly involved women sex workers (sexually prostituted women) in areas near the former US military bases. Because most of the testing has been done among women sex workers in those areas, there is a tendency to associate HIV/AIDS in the Philippines primarily with the US military bases.

nderstanding HIV and AIDS

This kind of scapegoating is not productive. We must face up to the fact that HIV infections are now reported among men and women, gay and straight, rich and poor, Filipi nos and non- Filipinos. The withdrawal of the US bases has not reduced the problem and neither will increasing penalties for prostitution.

What is the glob a1 status of HIVIAIDS?

HIV disease is now a pandemic, which means it is a global epidemic. The World Health Organiza- tion . (WHO) estimates that as of the end of 1996, there are about 22.6 million adults and 830,000 children living with HIV and AIDS. About 94 per cent live in develooine countries. WHO estimates that the

Module 1 : HIV an

What is the status of HIV and AIDS in the Philippines?

Reported cases are believed to represent only a fraction of actual cases in the country. The Department of Health often announces that the real figure may be 100 times that of the reoorted cases so if the reported cases are about 800, this would be projected to an estimate of 80,000 cases. More conservative estimates put the figure to be closer to about 20,000, quite low when compared with many other countries, but still alarming.

At present, reported

HIVl
AIDS cases come from every region in the Philippines and cut across all occupational groups.

How much *do we know today* about HIV/AIDS?

Intensive research in the last decade has established how HIV is transmitted. This means that we are in the position to prevent HIV infections. The search for a cure for HIV infection and AIDS has, however, been more difficult and will take more time. This only emphasizes the need for effective prevention programs.

nderstanding HIV and AIDS

1. The Human immunodeficiency Virus (HIV) causes Aquired Immune Deficiency Syndrome (AIDS); however AIDS does not develop immediately after infection.

2. We will probably never know the origins of HIV and

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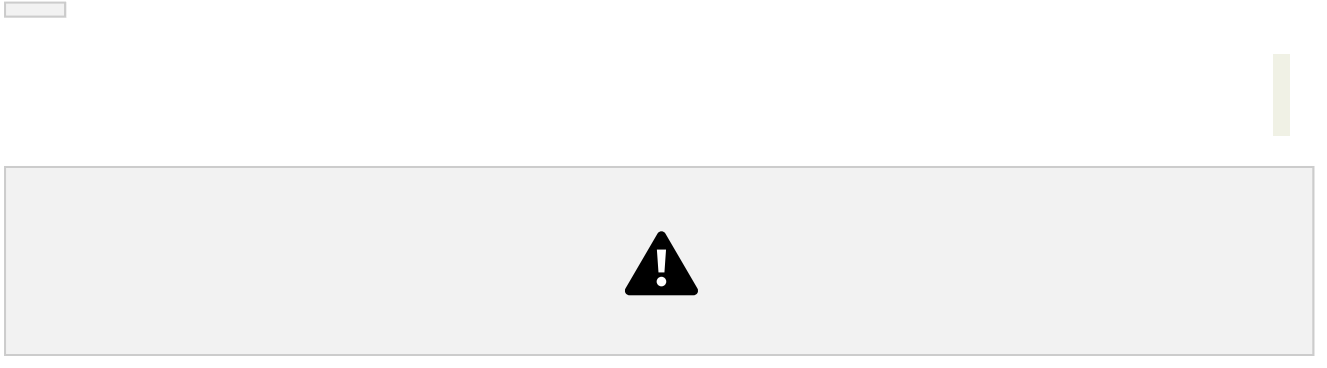
AIDS. It is more important to recognize that HIV and AIDS have emerged in all countries of the world. We should be more concerned with preventing infections than finding out how the disease started.

3. We know enough about how HIV is transmitted to prevent infection.

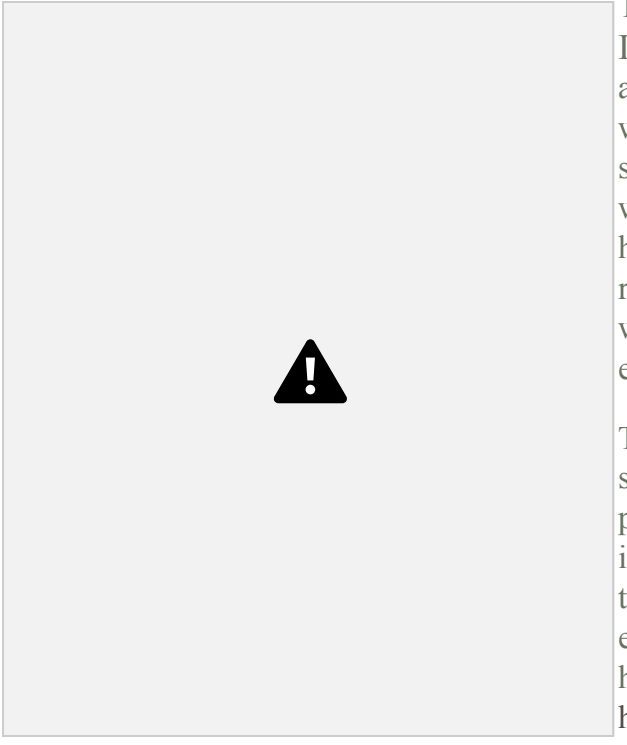


What happens
after HIV infection?

Each infectious disease can be described as having a natural history, moving from one stage to another. In all infectious diseases, there is a period between the time of infection and the appearance of symptoms. This period can be short for diseases such as the common cold (one to two days). With leprosy, it takes three to five years. With HIV, the period between infection and the appearance of AIDS can be as long as seven to **12** years.

Can a person who is infected with HIV still look and feel healthy

Definitely. A few days to a few weeks after becoming in fected with HIV, some (not all) people will develop symp toms like those of flu or mononucleosis: fatigue, headaches, fever, sore throat, lymphadenopathy (enlarged lymph nodes) and sweating. This acute illness episode lasts for one to three weeks. Most people will not be able to relate this illness to HIV infection.



This period of acute infection is short. It is followed by a stage that may last a few months to a few years, during which the person with HIV will have no signs or symptoms of HIV infection. But while the person may look and feel healthy, he or she can transmit the vi rus. During this period, HIV begins to weaken the immune system and eventually AIDS develops.

The data from industrialized countries show that about 60 percent of adults will progress to AIDS within **12** years after becom ing infected with HIV. Remember that all these figures are averages. There are eople who develop AIDS within a hort time after the infection and here are others who live past **12** years without AIDS.

What about anti-H IV antibodies?

We produce antibodies against specific infections. When HIV infection takes

place, anti-HIV antibodies are produced ***Don't they work against*** but they do not appear immediately. This has been called the window effect. In ***the infection?*** most people, antibodies to HIV commonly become detectable 4-8 weeks after infection. A small pro portion of infected individuals may remain antibody-nega tive for up to **6** months. (This is why "AIDS tests", which detect these antibodies, are not totally reliable.)

Antibodies usually remain throughout the period of infection but they are not able to clear the body of HIV. Research shows that the battle against HIV is not just a function of antibodies but also of many other defense mechanisms.

How does AIDS

Once it is in the blood circulation, HN invades

eventual 1 y

several types of cells including lymphocytes, macrophages, Langerhans cells, and neurons **d eve 10**

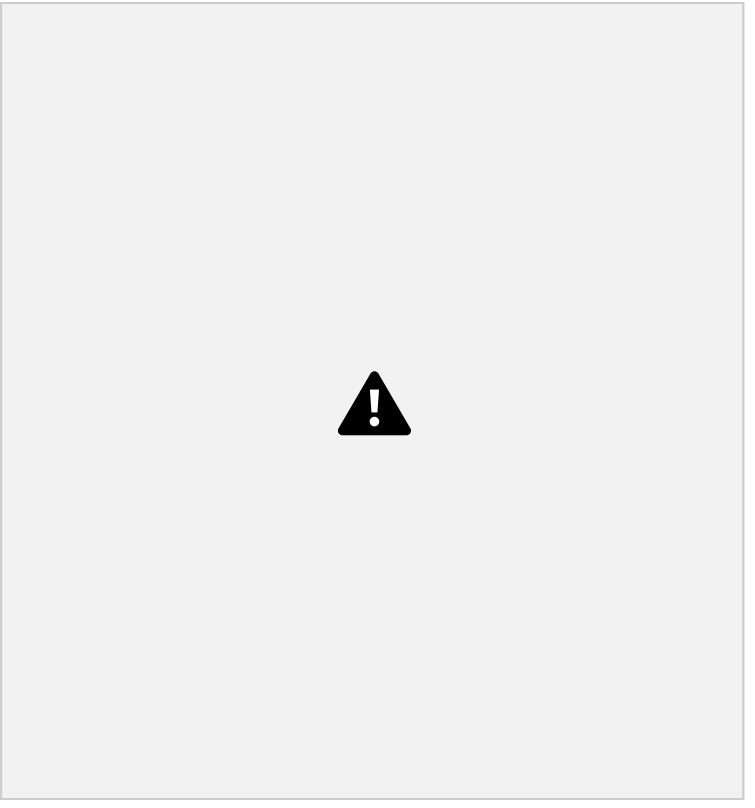
p? within the central nervous system.

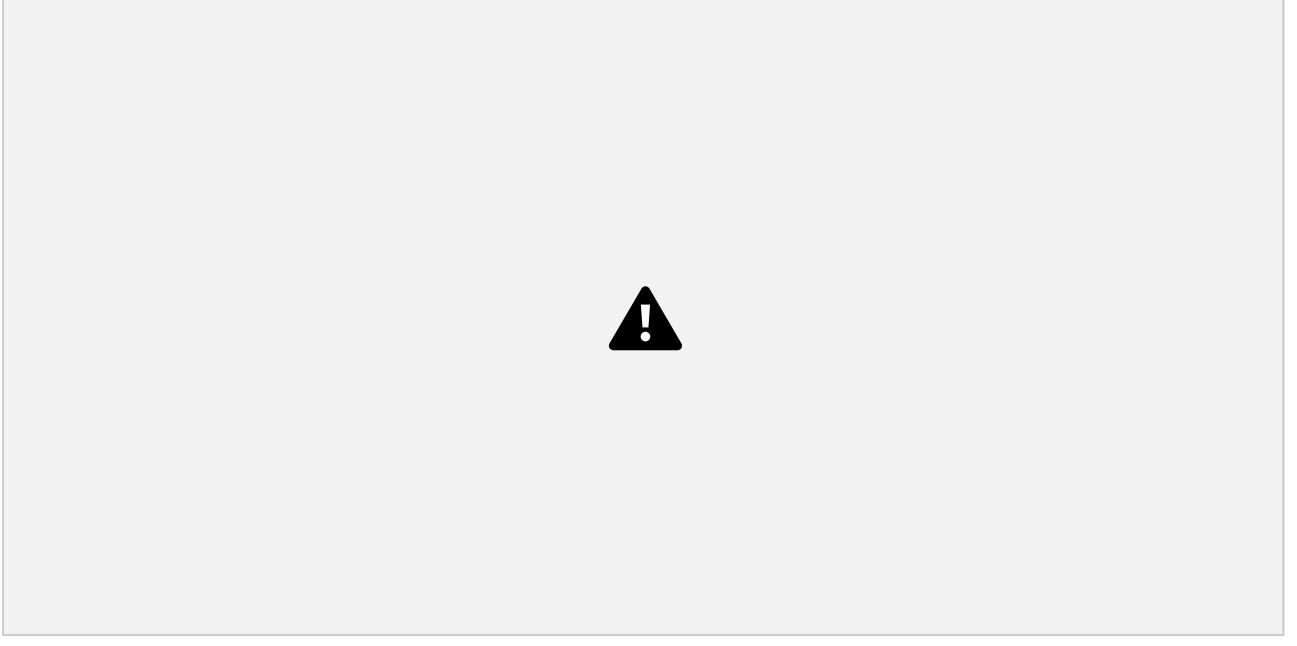
The reason HN is so deadly is that it attacks the body',- immune system. Specifically, HIV attaches itself to a pro tein molecule called CD4, found on the surfaces of T4 cells (also known as helper T cells, T4 lymphocytes or CD4 lym phocytes). Once the virus enters the T4 cells, it inserts its genetic material (also called provirus) into the T4 cells' nucleus, in effect, taking over the cell to replicate itself. Eventually, the infected T4 cells die, after having been used to reproduce HN.

why are T4 cells so important ?

The T4 cells play a vital role in our cellular immune system because they "identify" invading pathogens (disease-causing organisms). After identifying the invad

ers, T4 cells send messages to other parts of the immune system to produce antibodies and to mobilize attacks on the disease-causing agents. Without T4 cells, the body's





immune system does not make antibodies. Neither are new T5 cells produced to destroy infected cells. Eventu ally, AIDS develops because HIV has greatly weakened the body's immune system.

In the U.S., one main criterion used to identify the onset of AIDS is a T4 cell count below 200 per cubic millimeter of blood. (The normal count is above 1000.)

Are there other

Which H IV

, affecting many different parts of

i m m une system?

The virus itself mutates (changes its ge netic structure) rapidly, making it more difficult for the body's immune system to "recognize" the invaders.

In developed countries, medical researchers no longer rely on T4 cell counts alone to evaluate a patient's condition. Instead, they also measure viremia (levels of the virus in the blood plasma, sometimes referred to by the more im precise term viral load). However, measuring viremia requires laboratory procedures that are very expensive.

What are the symptoms ofAIDS?

As the body's immune system breaks down because of HIV, many different illnesses can occur with different signs and symptoms. Milder HIV-related illnesses have symptoms

such as enlarged lymph nodes, unexplained weight loss, persistent night sweats. Note that these symptoms are very general and could come with many other illnesses not related to HIV. Eventually, life-threatening opportu nistic infections and cancers set in and the person dies within one to three years.

What are the opportunistic infections and cancers found in AIDS?

Opportunistic infections (01s) are so called because they take advantage of the host's weakened immune responses. It may be caused by an organism that does not usually cause diseases in human beings (for example *Mycobacte rium avium,* which usually infects birds) or it may cause more severe diseases than it usually does in a person with a normal immune system (for ex ample herpes simplex ulcers lasting more than a month). In AIDS, a person may have several opportu nistic infections, which makes it more difficult

for the body to fight

Lung

Gut

Disseminated

Central nervous system

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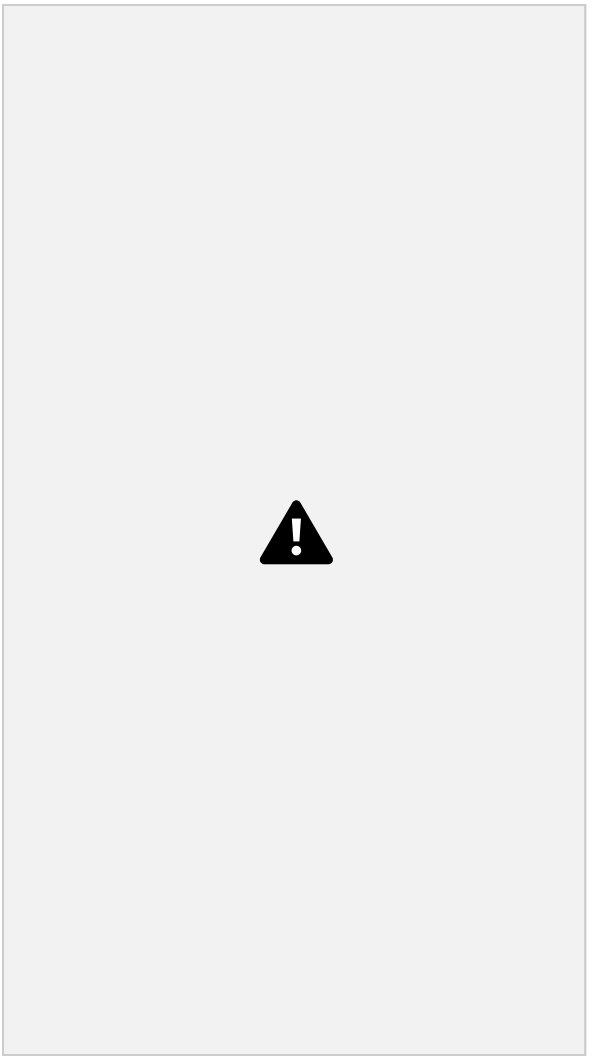


What about cancers?

People whose immune systems have been weakened by HIV may be more vulnerable to cancers. One explana tion is that in a weakened immune system, T lympho cytes are not able to detect and destroy malignant cells as quickly. Another explanation is that HIV infection may activate can cer-causing agents.

Doesn't HIV in itself cause any illness?

HIV results in different forms of mal nutrition, which leads to wasting in the patient. The malnutrition is aggravated by other illnesses such as chronic diarrhea that comes with cryptosporidiosis.

HIV directly affects the brain and causes HIV dementia with distur bances of brain functions including memory, orientation, comprehension, learning capacity, language, and judgement. HIV dementia is usually found in the more advanced stages of AIDS.

Finally, we should recognize the many psychiatric problems that may come with HIV and **AIDS.** Some of these may be directly due to the infection itself, as when the virus or other opportunistic infections affects the central nervous system. In other cases, the behavioral problems - depression; alcohol or drug dependency and self-destructive behavior - come as part of coping with a disease that presently has no cure and is so heavily stigmatized.

Module 2: From HIV infection to AID *Are there difierences in the*

opportunistic infections for AIDS *in developed and developing countries?*

Definitely. In developing countries, tuberculosis seems to be the main serious opportunistic infection. In developed countries, the more common ones are Pneumocystis carinii pneumonia and Kaposi's sarcoma.

Because the epidemic exploded in developed countries, many of the pictures of people with AIDS that have appeared in the media concentrate on diseases such as Kaposi's sarcoma. This reinforces misconceptions that one can "detect" a person with HIV or AIDS by looking for the blue spots on the skin found in all patients with AIDS.

There may be other opportunistic infections specific to a particular area. Thai medical researchers, for example, are now reporting high rates of fungal infection, Penicillium mameffei, in people who have developed AIDS, both in Thailand and in neighboring southeast Asian coun tries. Rats are the intermediate vector for this infection, which is clearly related to agricultural environments. Researchers and clinicians in developing countries need to be alert to these local opportunistic infections.

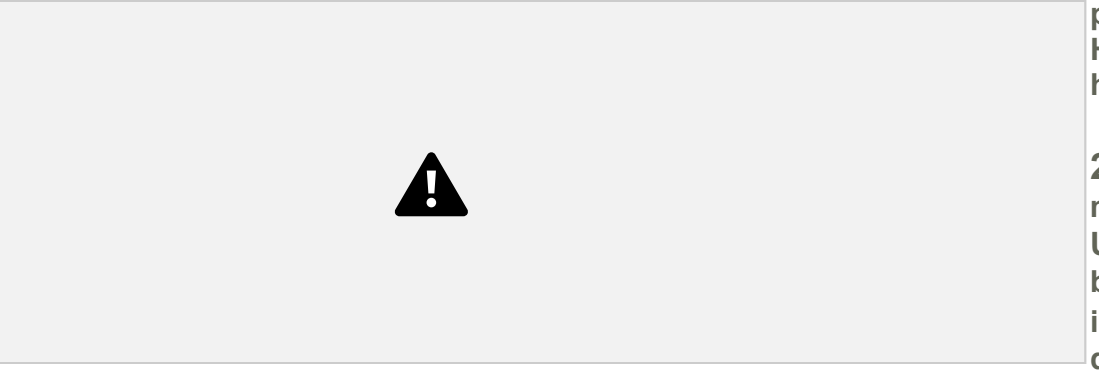
What about the link between HIV infection and tuberculosis ?

HIV infection weakens the immune system. Thus, tuberculosis may be reactivated, by speed ing up a primary infection, or by external reinfection. Tuberculosis will, in turn accelerate HIV disease by activating HN production in lymphocytes and macrophages, which helps to spread HN infection to other cells.

Tuberculosis in patients with HN can be pulmonary (in the lungs) but a large percentage also have extrapulmonary disease, involving the bone marrow, the **liver** and the lymph nodes. About half of HN patients with

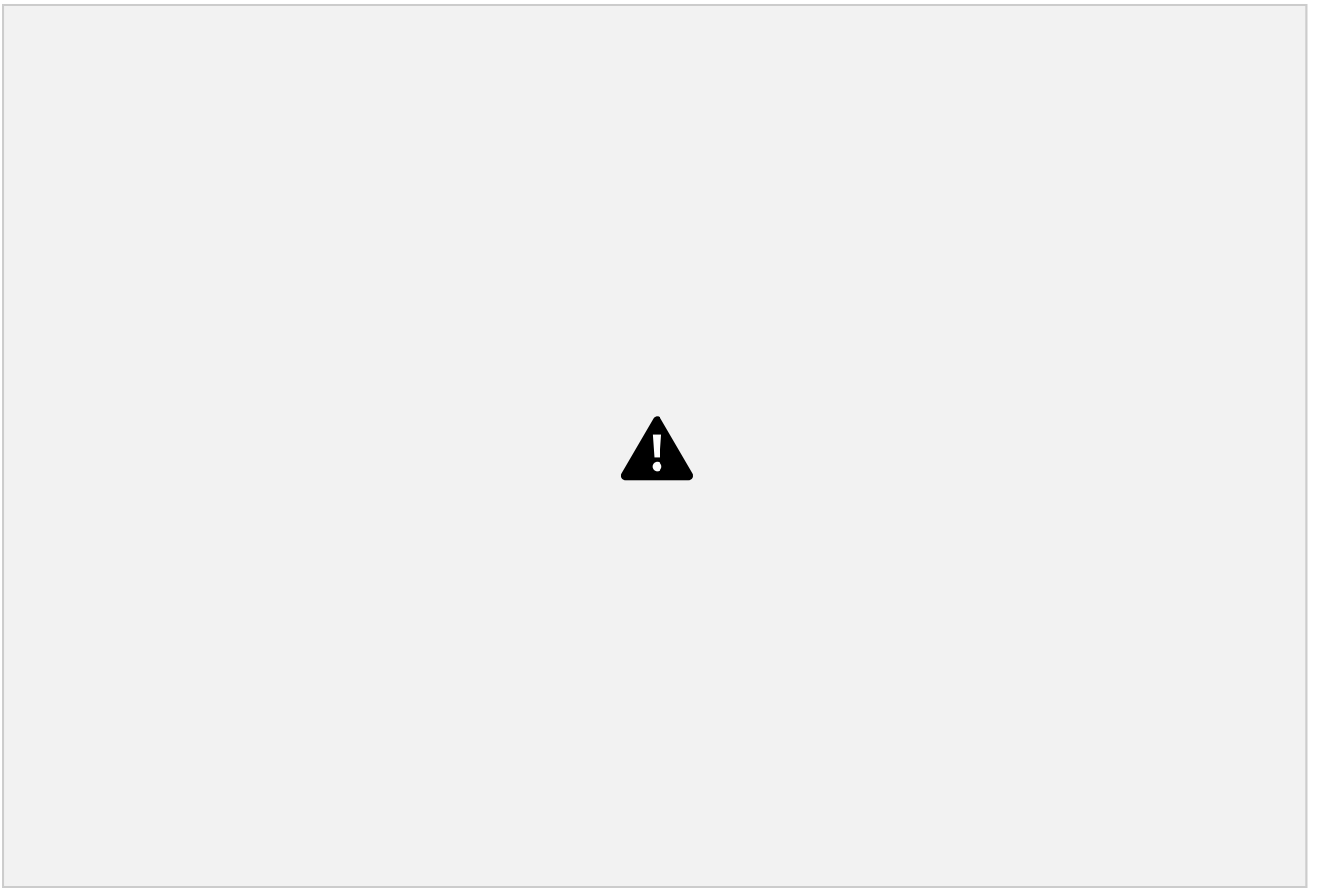
Micobacterium avium intracellulare 0 infection.

advanced tuberculosis will also develop disseminated



person infected with HIV can look and feel healthy.

2. It takes several months to years (in the US, 7 to 12 years) between becoming infected with HIV and developing the



3. People with AIDS die from severe opportunistic infections

Aren’t there other public health problems in the Philippines

*hat deserve more It is true that the leading causes of death in the Philip attention than pines are still age-old diseases such as pneumonias, must be tackled. HIVIAIDS? tuberculosis and diarrheal diseases. All these problems

It would be a mistake though to think that HIV will not become a problem in the Philippines. It is estimated that when the first few AIDS cases were reported in western countries in the early part of the 1980s, there were already about 100,000 people with HIV. The epidemic therefore started earlier, and was "silent" because there are no signs and symptoms in people with HIV. We face a similar situation in the Philippines. There are probably already thousands of Filipinos who do not know they have been infected, and are spreading the infection. Those in fected now will not develop AIDS until several years from now. The problem will eventually pose an unbearable

Number of deaths **Ratel100,OOO**

I Cardiovascular diseases
2 Pneumonias
3 Malignant neoplasms
4 Tuberculosis, all forms
5 Homicide, suicide, other injuries 6Accidents
7 Chronic obstructive pulmonary disease (COPD: chronic bronchitis, asthma, emphysema) **8** Diarrheal diseases
9 Septicemia
I0 Respiratory conditions of the fetus & newborn
I I Nephritis, nephrotic syndrome **I2** Gastric, duodenal, peptic ulcer **I3** Diabetes meliitus
14 Measles
I5 Avatiminosis & other nut. def.

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5509
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3874
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Base Source: Philippine Health Statistics I992 (Manila: Health Inteliigence Service, Department of Health, 1996)

Module 3: Socioeconomic impact of HIVIAID

burden on our already inadequate public health and on society in general.

Many of the opportunistic infections that develop during AIDS are already serious problems in the Philippines and will become even more widespread as the HIV epidemic spreads. Tuberculosis is an example. HIV infection and tuberculosis form a dangerous alliance because HIV can reactivate latent infections, or cause more rapid progres sion in primary infections, or, quite simply, make it easier for reinfection.

We must remember that the prospects for a cure in a near future remain dim. As HIVIAIDS spreads, many previous gains in public health will be reversed: life expectancy in some countries are already dropping and the incidence of other HIV-related diseases, particularly tuberculosis have increased.

Note that in the Philippines, the 1997 total national government budget for health and nutrition services is only equivalent to about P 190 per Filipino. **An** HIV/AIDS epidemic will force us to make many difficult choices. For example, the minimum cost of hospital care (without costs of drugs) for each person with AIDS is about P28,OOO per year. This amount could provide medicines for 18 people with tuberculosis, or vaccines for 3,000 infants.

What are some of the social and economic consequences of HIV/AIDS?

The problems associated with HIV/AIDS include not just treatment but also the health dimension. At present, about reported HIV/AIDS cases in Philippines the between 20 and 40 years, aged the usually productive years in people's cally lives.

losses d ployment and added responsibilities in term dents who lose support. In countries where tion is now widespread, agriculture and indus suffered from the loss of many of the pr for the sick, and the dependents (ch elderly) left behind will strain social support syst as economic problems grow, increased politic usually follows.

As with many diseases, the greatest impact will be on the poor. Poverty itself increases people's vulnerability to higher rates of malnutrition among the that their defense systems are already compromised, increasing their susceptibility to many infections. It is also the poor who have no choice but to use unscreened blood that may have HN. It is the poor who have the least access rmation that they need to pre DS. And when HN/AIDS

I. HN/AIDS is a medical problem that will strain our already inadequate health care system.

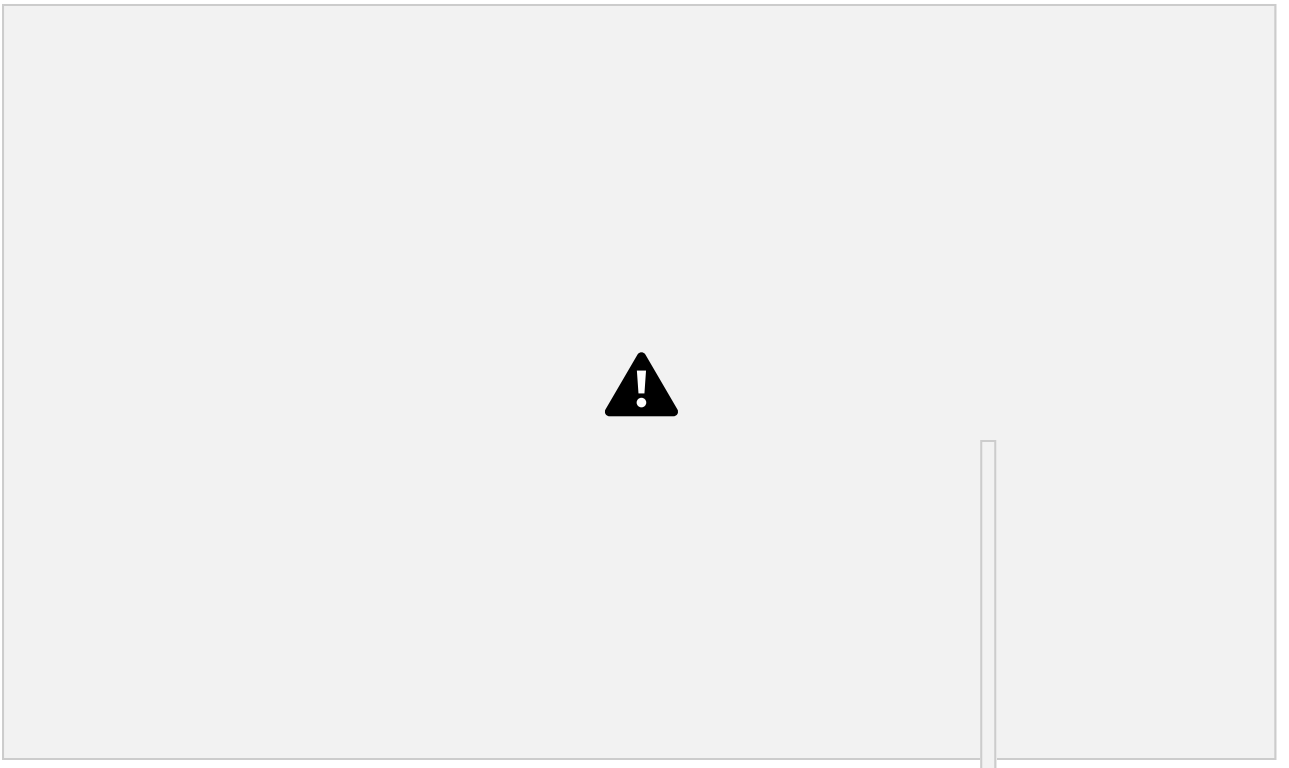
2. HIV/AIDS will have adverse effects on economic and social

3. The **poor** are the most vulnerable to the effects of HIV/AIDS and willsuffer the most as the epidemic spreads.

nderstanding HIV and AIDS

How is HIV transmitted?

A person must already be infected with HIV to transmit it to other people. The longer a person has been infected, the more of HIV he or she will carry, although medical research also shows that virus levels are very high ini tially after infection.



Schematic view ofthe course of HIIsI infection and disease

Much of the literature about HIV talks about "body fluids" as the medium through which the virus is passed. This tends to be misleading. HIV does thrive in many types of body fluids but for an infection to occur, there must be: (a) sufficient amounts of the virus transmitted and (b) a way for the virus to enter the bloodstream. These two conditions must be met for an infection to take place. To understand how this works, let us look at two case examples:

One is saliva, around which there are many myths (e.g.kissing transmits HIV). The reason saliva is not a way for transmitting HIV is that there are much too low concentrations of the virus in this fluid. Even in patients with periodontal (gum) disease, infected cells have rarely been found. This is probably because saliva itself has anti viral properties.

Module 4: HIVTransmissic

On the other hand, one could look at cerebrospinal fluid (CSF), which has very high levels of HIV but is not a source of infection. The reason is that it is very rare for people to come in contact with cerebrospinal fluid. This is the fluid obtained from the spinal column. Health professionals may be exposed when they try to get samples of cerebrospi

nal fluid although even then, the chances of infection will still be very low since it is hard for the virus to go from the patient's cerebrospinal fluid into the health professional's bloostream.

In assessing the risks of infection, always consider the amount of blood and the possibilities of such blood enter ing another person's bloodstream. Thus, the risks for infection through a barber's razor or through manicuring equipment are quite low because the amount of blood is very small and is unlikely to be infectious.

The types of body fluids through which HIV is most likely to be transmitted are:

Blood and **Mood** **pmducts**
Semen
', Cervical and vaginal secretions
Breastmilk

Since HIV is found mainly in blood, semen, cervical and vaginal mucus, and breastmilk, we can see why the virus is more likely to be transmitted through:

1 Sexual intercourse

Blood transfusions and sharing of infected **2** syringes and needles among intravenous drug users, and

3. Vertically or perinatally (from a pregnant woman to the fetus during pregnancy, child delivery or breastfeeding).

Can HIV be transmitted through casual contact?

Many of the fears about HIV are based on insuf ficient information. HIV is dangerous, but we should also understand that Hm is much less infectious than many other microorganisms such as hepatitis B virus.

HIV does not,live very long outside of the body. Disinfec tants such as alcohol and chlorine bleach **(5.25** percent sodium hypochlorite) can easily kill the virus. HIV (as well as hepatitis B virus and herpes virus) cannot pen etrate intact skin. The skin is acidic and has complex lipids that help to inactivate viruses.

HIV is not transmitted through casual contact in any setting - schools, homes, hospitals. HIV is not transmit ted either through insects, food, water, toilets, swimming pools, drinking and eating utensils.

Do mosquitoes transmit HIV?

Mosquitoes cannot transmit HIV. Mosquitoes do not .''ect blood; instead, they suck up blood. Moreover, the extremely small amount of virus that they suck up does not live long inside the mosqui toes' digestive system. If mosquitoes really trans mitted HIV, then we would have as many HIV infec tions as malaria cases. Note, too, that mosquito nsmitted malaria is found among all age groups while **HIV** *I'* is found mainly among adults, reflecting the fact that HIV is mainly transmitted through sex. EI **Hieh** levels of

HIV are found in the blood because the **virus** at tacks T4 lymphocytes and other types of blood cells.

How is HIV transmitted through blood and blood Droducts?

There are several ways of receiving infected blood A. Blood Transfusions.

A person receiving HIV-infected blood or blood products has a high risk of getting the infection. Note, however, that a person donating blood is not at risk for HN infec tion. The **risk** comes with receiving infected blood.

B. Sharing of Unsterilized Syringes and Needles Used intravenously.

An infected person who injects drugs into himselfherself might share needles with other users. Since these drug users often draw blood back into the syringe to check if the needle is in a vein, they may also bring HIV into the needle and syringe. HN is transmitted along with the drug or medicine injected using the infected syringe and needle. The amount of infected blood may be small but because injections are done repeatedly and involve expo
sure to the blood of several people, the chances of infec tion become higher.

k c. Transmission During Pregnancy.

About 20 to 40 percent of babies

born to mothers infected with HIV will be i
The virus may be transmitted from the m
to the child through the placenta, or durg the birth process itself. Risks of transmissiol appear to be greater when the developed advanced ***AIDS.***

D. Organ Donations.

Since donated organs contain large amounts of blood, the chances of HIV infection are high if a person receives an organ from an infected donor.

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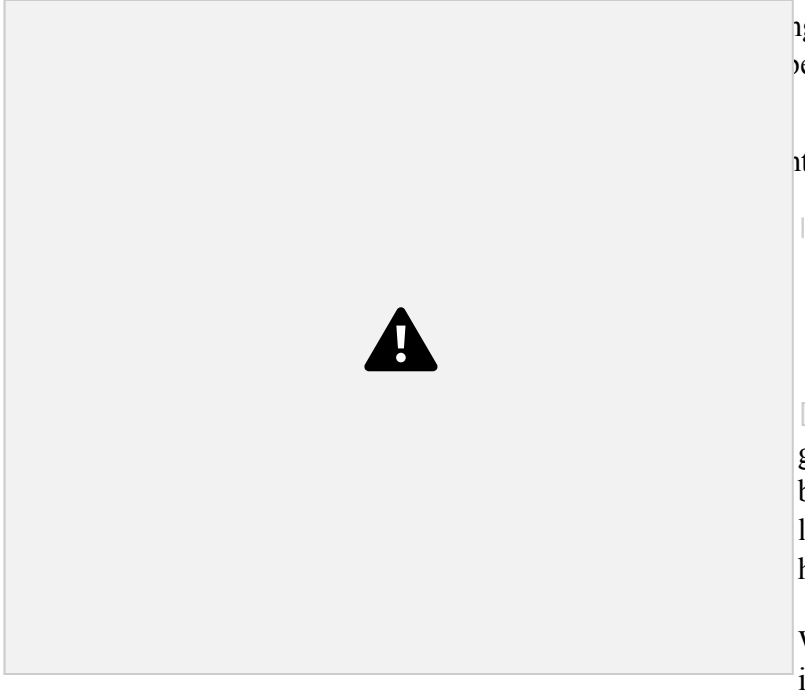
E. Accidental Exposure in Hospitals and Clinics.

Infections can occur in health care settings although these are uncommon when compared with transmission through sex. Infections in health care settings can pass through health care providers to patients; from patients to health care providers, or from patients to patients.

The most common (but still very rare) route of infection in health care settings is through needlestick injuries (usu ally after intravenous procedures) or cuts with sharp instruments contaminated with HIV. The risks of infec tion after exposure through needlestick injury is actually quite low: about 0.37% (compared with an estimate of 1% for one episode of unprotected heterosexual intercourse with a partner with HIV).

Infection can also occur if blood from an infected person comes into contact with open wounds, broken or inflamed skin, or mucous membranes such as in the mouth or eye. Remember that contaminated blood cannot enter through intact skin.



ng patients have been grossly exaggerated. been blown out of orooortions. The fact is

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'Always remember that the risks for infection through injections in a hospital are very much lower than through sexual intercourse or through the sharing of needles and syringes by injecting drug dependents. For infec

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gators have not been able to estab lish how this happened.

What we do know is that IIIV can also be transmitted among patients if hospi tals and other health care facilities do t properly sterilize needles, syringes, and other medical

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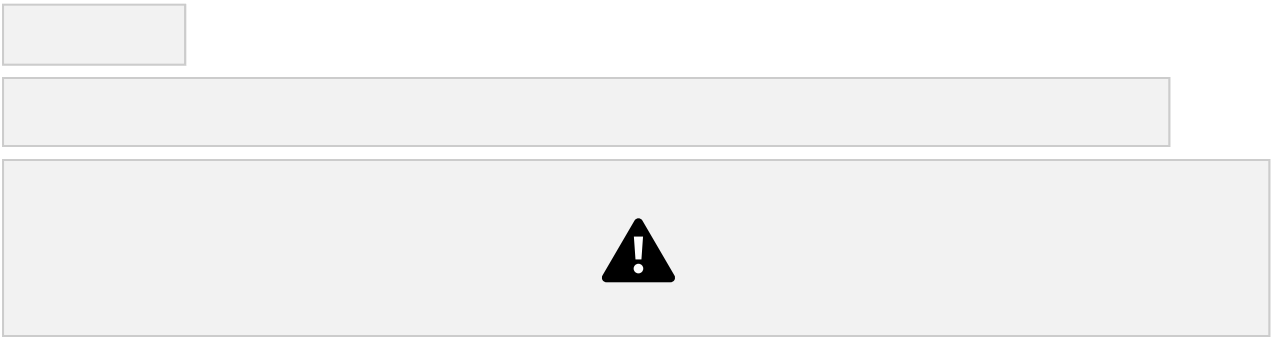


How is HIV transmitted during sexual intercourse?

Obviously, sexual intercourse would be the main route of transmitting infected semen and cervical or vaginal secretion.

Semen carries various types of cells. including blood cells that are the targets for HIV. Note that even in men who
have had a vasectomy, HIV can be found in the semen.

HIV seems to be more concentrated in cervical mucus than in vaginal mucus. The levels in both cervical and vaginal mucus are usually much lower than in semen.

Is HIV/AIDS another *sakit ng babae or women's disease*

Women, especially women sex workers, are often blamed for the spread of sexu

The term *sakit* ***ng*** ***babae***

reflects this myth.

transmitted to men?

ally-transmitted diseases and

HIV/AIDS.

Medically speaking, male-to-female transmission of sexu

ally-transmitted diseases occurs more easily than through the female-to-male route. We have already mentioned that semen from an infected male tends to have higher levels of HIV than the cervical and vaginal mucus of an infected female.

One reason why male-to-female transmission is more com mon is that a woman's reproductive system (the vagina, cervix, uterus) is more vulnerable to tissue damage than the man's penis. Such injury facilitates entry of infectious agents. Another reason why sexually-trans. mitted diseases occur more frequently through the male to-female route is the length of time semen stays in the woman's reproductive system after sexual intercourse.

With sexual transmission of HIV, male-to-female and male-to-male routes are more common than female-to male transmission. Female-to-female sexual transmis sion of HIV is extremely rare.

The risk for HIV infection occuring during sex with a per son with HIV depends on the opportunities given or the

Are all forms of sexual intercourse eaually risky for HIV?

The risk for HIV infection occuring during sex with a per son with HIV depends on the opportunities given for the virus to enter the blood circulation through breaks in the tissue of the organs or area involved during sexual inter course. This can be the vagina, the penis, or the anus (for anal intercourse). The level of risk varies with different sexual activities.

High Risk

Being the recipient **or** insertor in anal intercourse with out a condom.

Being the recipient **or** insertor in vaginal intercourse without a condom.

Any practice that causes bleeding to tissue, e.g., inserting the hands, fist, **or** rough objects on the penis, into the vagina, or anus, during or following intercourse without a condom.

Probable Risk

Being the recipient or insertor in anal, vaginal or oral intercourse with a condom. (In the next module, we will explain why there is still some risk even with a condom.)

Being the recipient or insertor in oral intercourse without a condom. There is still controversy over the risks of oral sex (fellatio when done on male; cunnilingus when done on a female). The risk for HIV transmission during oral sex is present but is much lower than anal or vaginal sex. Also keep in mind that other sexually transmitted diseases (e.g. gonorrhea) can be transmitted through unprotected oral sex.

No Risk

Non-penetrative sexual activities such as masturbation, petting and deep kissing, are safe. (Note that mutual masturbation theoretically carries some risk if there is infected semen or vaginal secretions which enter the body.)

How is HIV transmitted vertically or perinatally?

Perinatal transmission (also sometimes called vertical transmission) occurs when HIV is transmitted from the mother to her child during pregnancy, delivery or during breastfeeding. Calculations on the risk of transmission during pregnancy or delivery vary greatly. In western countries, the risk is estimated at between **20** and **40** per cent. These risks may be higher in developing countries.

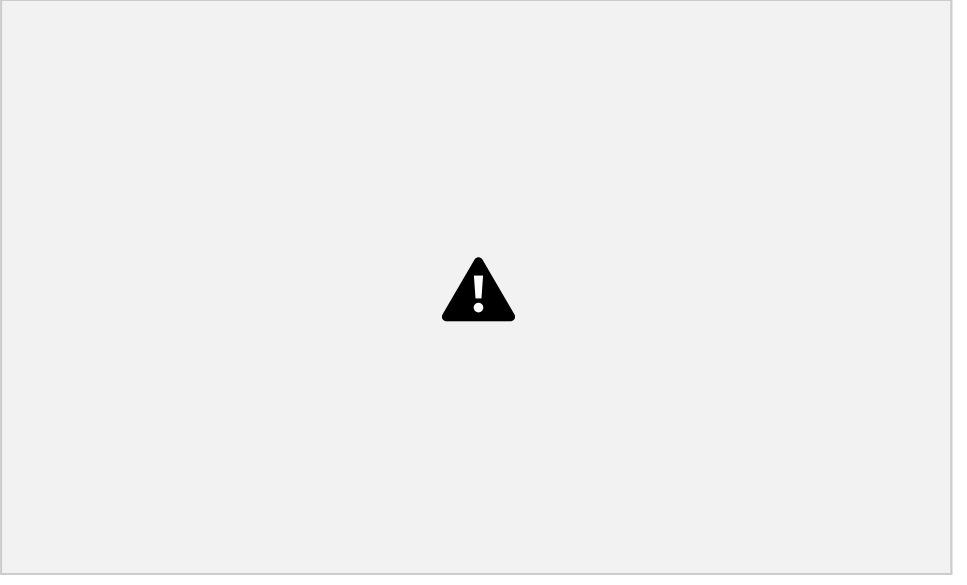
Vertical transmission depends on the mother's stage of infection. As explained earlier, the viral load is higher right after infection and in later stages. The placental barrier usually blocks viruses from passing so a breach or

injury has to take place for infection to occur. During delivery itself, the child's exposure to blood and mucus increases its chances of infection.

Should mothers stop breastfeeding given the risks for HIV?

There is increasing concern over transmission of HIV through breastmilk. At this time, the stand of the World Health Organization and UNICEF is that the advantages that come with breastmilk's nutritive and anti infective properties still outweigh the risks of HIV transmission so a mother with HIV should still be advised to

breastfeed, especially in countries where HIV prevalence



Breastfeeding

nts against gastroi
nal and respiratory illness
while bottlefeeding ma
ally expose infants to
health problems such as
rheas (when dirty wa
used to prepare the for
and malnutrition (wh
ents use less infant for
powder to save on costs).

1. HIV is not transmitted through casual contact.

2. A person must be infected with HIV to transmit the virus to another person.

3. The chance of being infected with HIV depends on the amount of infected fluid that is transferred and the concentration of the virus in the fluid.

nderstanding HIV and AIDS

How can we avoid. *becoming infected* with HIV through BLOOD?

Blood from an infected person carries the highest concen trations of HIV. Other diseases such as malaria, syphilis, and hepatitis B can also be transmitted through blood. Preventing the transmission of HIV and other diseases through blood would include the following measures:

I ▪ ***Screening of blood and blood products.***

Only about twenty percent of blood products in the

Philippines are screened for HlV. This puts the general population at risk from HIV infection. The government has started screening commercial blood donors but this is still very limited. Use blood and plasma only from blood banks accredited by the Department of Health or from the Philippine National Red Cross.

2. ***Receiving blood from someone likely to be uninfected.*** When transfusions are needed and HIV screened blood is not available, receive blood from some one you know to be most likely uninfected. (This is more easily said than done - one can never really "knov? if some one is uninfected.)

3. ***For health workers, use gloves and be cautious when handling blood. semen, vaginal secretions, cerebrospinal fluid. synovial, and amniotic fluid.*** Precautions should also be taken with syringes, needles and equipment that may have been contaminated by HIV. All syringes, needles and medical equipment should be sterilized to prevent HIV transmission among patients. In many countries, needles are not re-used and are disposed through a puncture-proof container. Health professionals are also advised not to recap used needles because there is the possibility of needlestick injuries.

4. ***Injecting drug users should be counselled on the risks of HIVIAIDS that come with sharing of needles and syringes and "harm-reduction measures"*** such as using needles and syringes only once; not sharing these inject ing paraphernalia, or sterilizing the equipment. This can be done by boiling syringes and needles in water for 15 minutes. If boiling is not possible, equipment should first be thoroughly rinsed with clean water to remove blood, and then soaked in full-strength household bleach (chlorox) for at least one minute, followed by another rinse with clean water.

infection ***to*** the infant during pregnancy or at delivery. The decision to have a child, or to use contraception, must be the mother's own after she has been informed about the risks for HIV.

How can we prevent sexual transmission of HIV?

Complete sexual abstinence is one option, but it is not the most practical measure for many people.

A long-term mutually faithful relationship (monogamy) is another option. Long-term means years, not weeks. Mutu ally faithful means both partners being monogamous during the relationship. If one partner has unprotected

intercourse with multiple partners, the faithful spouse or lover is actually being exposed to possible sexually-transmitted infections of the other sexual partners.

For people who cannot abstain or remain in a long-term mutually faithful relationship, safer sex practices remain the only other option. Remember that this also applies to a person who is monogamous but who is not sure about the activities of his or her sexual partner.

Safer sex includes any kind of sexual activity that prevents an exchange of HIV infected blood, semen or vaginal fluids. The correct use of condoms is one safer sex measure to be used whenever penetration (penile anal; penile-vaginal) is involved. Other safer sex activities are those not involving penetration: masturbation, petting, necking, kissing.

Safer sex can be fun. Use the brain - human sexuality is not just what we have between our legs, but also what we have between our ears: the brain, our senses. Safer sex and responsible sex are inter-related. AU this can be fulfilling and fun and quite challenging.

AIDS

How do condoms *work* in preventing HIV infection!

Used correctly, latex condoms prevent infected semen or vaginal mucus from entering the sexual partner of an infected person. **HIV,** and many other infectious agents that cause sexually transmitted diseases, cannot pass through the condom.

Because using a condom is not just a right, but a responsibility, both partners must learn to insist on the proper use of the condom.

What proof is there that

condoms prevent HIV infection?

Numerous laboratory tests have shown that HIV cannot pass through condoms that pass international quality standards. Condoms are tested by manufacturers for leaks, including the introduction of large amounts of air and water to see if the condoms burst.

A common misconception is that condoms have pores. One study using electron microscopes magnified condoms by 30,000 times, a magnification at which HIV-sized particles can be observed. The researchers did not find pores, even when the condoms were stretched.

One study, often cited by groups opposed to condoms, did find "leakage" in **29** out of 89 condoms tested. "Leakage" here occurs in laboratory tests where large amounts of stress are put on the condom. In this particular study, researchers used substances equivalent to 100 million times the normal concentration of HIV in semen. Despite the "leakage" found using such unrealistically large concentrations, the researchers conclude that even in a worst-case scenario, condoms would provide 10,000 times more protection against HIV-sized particles than no condom at all.

Since it would be unethical to test condoms using human beings, medical researchers rely on long-term studies that follow "discordant" couples, i.e., couples where one partner has HIV and the other does not. The studies show

!!

The largest and most recent of these studies was conducted in Europe, involving **256** discordant heterosexual couples. These couples were fol lowed for several months (median of **22** months). None of the **124** male or female partners who con sistently used condoms became infected; in com parison, **12** of the 121 partners who either did not use condoms or used them inconsistently be came infected.

What is the *correct use of condoms?*

As explained earlier, condom failure does not occur be cause of pores in the condoms. The problems come with

condoms bursting or slipping off. Condoms have to be
rectly and consistently (i.e., with every sexual
rse and from start to finish).

The most important points in the correct use of condoms are explained below:

I. ***Talkabout it.*** ..Usingacondom is a decision that involves two people.

2. ***Use only latex (rubber) condoms.*** "Natural" condoms (lambskin) are too thin and may allow HIV to pass through. In other countries, there are now female and male condoms made out ofpolyurethrane. These also block HIV.

3. ***Condoms should be stored properly.*** Condoms can deteriorate with prolonged exposure to high heat, humidity and sunlight. Thus, a bad place to keep condoms would be a wallet in the back pocket, where heat and humidity can destroy the condom.

4. ***Do not use a condom if its package has been broken.*** Open the package carefully so that you don't tear the latex. Do not "test" a condom by unroll ing it and/or blowing into it before using. If it looks sticky or brittle, throw it away.

5. ***Put on the condom os soon as the penis is erect.*** Do not allow one uerson's genitals to touch the

nther’s **iinti** om is on.

i

6. *Pinch the end of the condom to squeeze* **air** *out of the reservoir (or nipple),* then roll the condom down over the penis. If there are air bubbles trapped inside, the condom may break.

7. *Ifthe penis is uncircumcised, pull back the foreskin* before rolling the condom over it.

8. Condoms that have been used for oral sex should not be used for vaginal or oral sex. If the condom breaks during intercourse, with draw immediately and put on a new one. With some couples, intercourse when the woman is on top may result in the lips of her vagina grasping the rim of the condom and pulling it off. In this position, the condom should be held on during intercourse.

9. *After intercourse, the rim of the condom* **(at** *the base* ***of*** *the penis) should be held against the man as he withdraws.* Other wise, the penis may slip out and result in semen spillage. Withdrawal should be done before the penis becomes limp.

10. *After removing the condom, tie* ***a*** **knot** *in the open end to confine the semen.* Dispose of the condoms properly (meaning in a trashcan). ***Never re-use the condom.***

11. *Immediately after intercourse, both* ***part*** *ners should wash* ***off*** *any semen or vaginal secretions with* ***soap*** *and water.* Avoid so called antibacterial soaps because a woman can g is when the antibacterial soap destroys other "good" fungi present in the re p tract.

,dentanding HIV and AIDS -

What about

lubr icant s?

The use of condoms can cause "rubber burn" or irritation during intercourse. This is because of insuffi cient lubrication. This lack of lubrication can make the condoms burst. Many condoms on the market now come lubricated but even this may not be enough so it is im portant to have an extra supply of

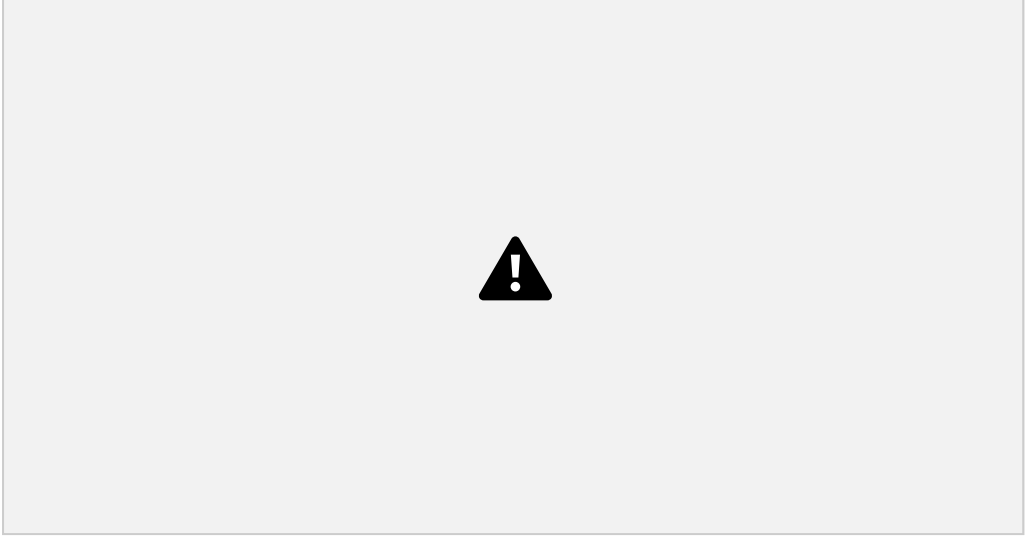
Do not use oil-based lubricants such as cooking oil, mineral oil, jelly, hand and body or d lotions. These can damage la s and allow HIV to pass

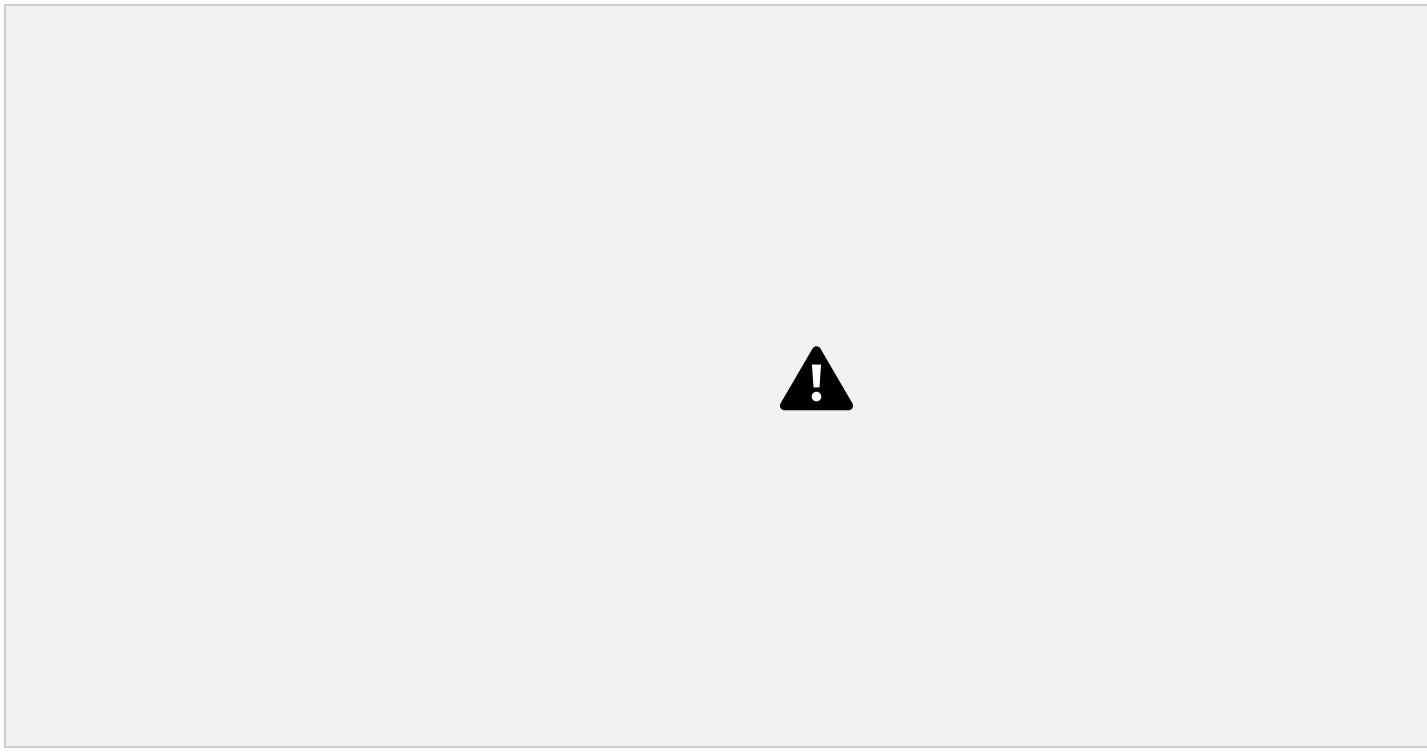
pugh. Use water-based lubri
such as K-Y jelly or glycerine.
&e these lubricants are expensive,
u can dilute these with water.

What about

n on oxyn oL9?

Some safer sex guides suggest using the spermicide nonoxynol-9 as additional protection against HIV. There is still a lack of controlled clinical studies to prove that this product works against HIV so it is difficult to en dorse its use. Recent studies also indicate that frequent use of nonoxynol-9 may irritate the vaginal and anal tract, which might even facilitate HIV infection.





Besides condoms, are there

other contraceptives

that prevent HIV infection?

Only condoms prevent HIV infection. Pills, IUDs, inject able contraceptives do not prevent HN infection. Thus, a woman on the pill or IUD may still have to use condoms if she is not certain about her partner's exposure to HIV.

Withdrawal is ineffective in preventing pregnancies and sexually-transmitted diseases. Sperm and HIV may be present in the "pre-cum" or the small amount of fluid secreted by the penis even without ejaculation.

I . It is possible to prevent transmission of HJY. Measures include screening of donated blood; avoiding the sharing of needles in intravenous drug use; sexual abstinence, mutually faithful relationships or safer sex practices.

2. Safer sex involves practices that prevent contact with infected blood, semen or vaginal fluids. Safer sex includes

What do we mean by HIV risk factors?

When the HIV/AIDS epidemic first began to spread, public health authorities referred to “high-risk groups” as pri mary targets for prevention campaigns. Today, we know that risk factors for HIV are not necessarily limited to any particular group. Many biomedical and psychosocial factors need to be considered when we evaluate vulner ability to HIVIAIDS.

What are some biomedical risk factors associated with H IV?

Some of the biomedical factors that affect a person's risk for HIV/AIDS are explained below.

I ▪ Other sexually-transmitted diseases (STDs) and reproductive tract infections

Persons with a previous history of STDs - particularly genital ulcer diseases (GUD) such as syphilis, chancroid and herpes - are at higher risk for HIV infection. This is because these diseases injure the membranes and tissues in the genital tract. Other STDs such as gonorrhea can also increase the chances of HIV infection because with each infection, the body produces more white blood cells, which attract HIV. Other reproductive tract infections (RTI) such as pelvic inflammatory disease (PID) could increase risks for HIV.

2. Non-circumcision

Some scientific reports suggest that uncircumcised males may be at higher risk for HIV infection and genital ulcer diseases. The foreskin is believed to provide larger surface area for taking up HIV and other infectious organisms. The foreskin is also reported to be more susceptible to microscopic injuries during intercourse.

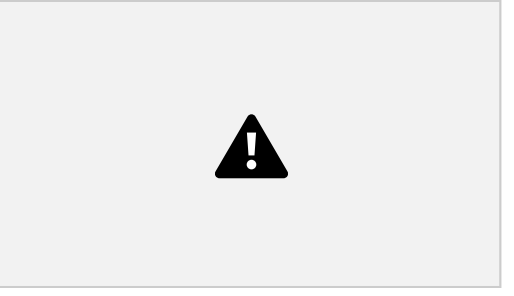
3. Malnutrition

There is evidence suggesting that in malnourished women, the vaginal tract is more prone to bruising and injury during intercourse, thus facilitating the entry of HW.

4. Douching *(iriga)* after sex

Contrary to popular beliefs, douching after sex - whether of the vaginal or the anal area - can actually increase chances of sexually-transmitted infections because the water, introduced with pressure, can damage the tissue and push infectious microorganisms further into the body.

These are only a few of the biomedical risks associated with HIV. Note that the risks described above all involve injury or trauma to the reproductive system, which in turn increases the chances of HIV infection. There are, undoubtedly, many other similar risk factors. For example, the use of *bolitas* (small metal balls inserted under the skin of the penis) among Filipino men can irritate the vaginal tract and facilitate the entry of HIV. We need more research on such culture-specific practices that might affect HIV transmission.



We have mentioned that there is no such thing as a "high-risk group". Instead, the problem is one of high-risk behavior that puts us at risk for HIV/AIDS. We have discussed the high risk sexual activities, mainly unprotected penetrative sexual intercourse.

High-risk behavior includes not just the behavior itself but the beliefs and attitudes that shape our behavior. These are also sometimes referred to as the psychosocial factors that determine our risk for HIV/AIDS.

What are specific examples of *h igh-risk behavior?*

Unprotected sex (i.e. penetrative sex without a condom) with a partner whose sexual history is unknown is a common form of high-risk behavior. Underlying this behavior is a lack of knowledge regarding HIV and its transmission. Other reasons for people to practice high-risk activities would include attitudes such as denial ("AIDS is not a problem in the Philippines" or "My partner is not an American") or may be based on inhibitive culturally-linked ideas such as being ashamed to ask your partner about his or her previous sexual history, or not wanting

to displease a sexual partner by insisting on the use of a condom.

practices are not the only form of high behavior. Sharing of needles among another way of trans

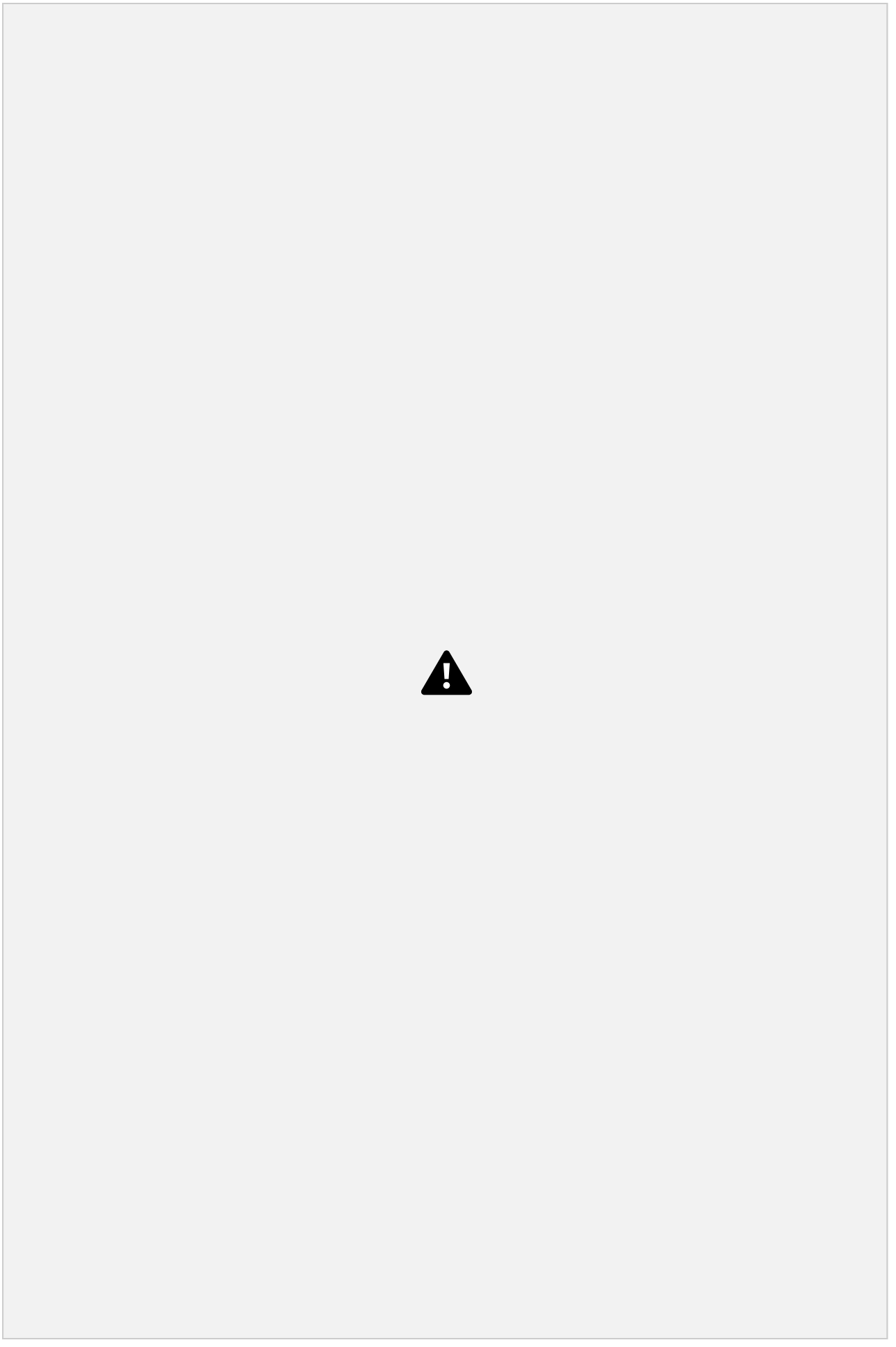
her “milder” forms of substance abuse, ch as the use of alcohol or “softer” drugs a, uppers (amphet- ,amines) and downers (tranquillizers and ‘other central nervous system depres sants), may also increase

one’s risk for **HIV** infection. The danger here is that even if one has enough knowledge about **HIV** and **AIDS,** your judgment is impaired under the influence of alcohol and drugs. se, deciding to use, condom on, become

What is a

People may be put into a high-risk situation because of a variety of social, political and cultural factors. Sex work ers, for instance, are not a high-risk group per se. They are, however, put into a high-risk situation in countries like the Philippines, where they have little or no negoti ating power. Many sex workers cannot even negotiate on how much they should be paid. In such a situation, it is even more unlikely that they can bargain with their clients to use condoms. Women sex workers are often perceived as people who put other people at risk for **HIV.** In reality, it is the reverse that is true: the women sex workers are at risk for **HIV** because of their clients.

Male homosexuals are also often unfairly labelled as belonging to a high-risk group. What puts male homo sexuals at risk is not homosexuality itself but society's discrimination against homosexuals and homosexuality. Since homosexuality in the Philippines is still largely ostracized, there are few places where gays can openly



meet other gays and establish meaningful and stable relationships. This forces many gays to go “underground, entering into quick and anonymous relationships with different people. In such an environment, negotiating for safer sex is difficult.

Many people tend to think only of homosexu als and sex workers as being at risk. But other sectors are also often put into situations of risk. Filipinos who have to work overseas - and they now number between two and four million - face a new and unfamiliar environment where they may be vulnerable to sexual abuse.

Even at home, women in general are placed in high-risk situations because of machismo values. Their spouses or lovers may profess to a mutually monogamous relationship and yet have unprotected intercourse with multiple partners. The problem is complicated by social norms that do not allow women to ask their husbands or boyfriends about outside relation ships or to simply accept that "it is natural for men to have extra-marital relationships."

Young men and women are also put into high risk situations because of adventurism and peer pressure. Many young men still have their first sexual experience in brothels, accompanied by other male relatives or their barkada. Because condoms still remain unacceptable among many older men, a behavior pattern of unpro tected sexual contact is taught to the next generation of males in our society.

Moralistic double standards present the most formidable obstacle in HIV prevention and control. Many still believe that because the Philippines is a "Christian nation" this means that HIVIAIDS will not be a problem here except among the "immoral". Many use this reason to block public education concerning sex and sexuality, making it difficult to discuss HIV prevention and control. Others believe that talking about sex and condoms will encourage "promiscuous" and "irresponsible" sexual prao tices. Such ill-informed and misguided leader ship and followership will prove to be fatal to many.

1. The risks for HIV infection may be increased in persons with previous or

existing sexually-transmitted diseases and reproductive tract infectlons.

2. People may be placed in high-nsk situations because of social norms and discrimination, moralistlc attitudes.

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How reliable is,

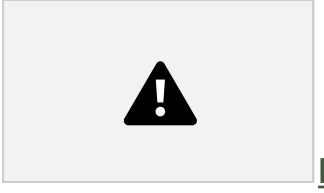
H

HIV,antibo If

someone is found seropositive

Where can one get HIV an

Are there tests to



HIV and AIDS

Are there tests *to detect AIDS?*

There is no such thing as an "AIDS test." **As** explained earlier, AIDS is a syndrome, with many different signs and symptoms depending on the opportunistic infections that develop. The diagnosis of AIDS is made when the patient has several opportunistic diseases, has decreased T4 cell counts, and is verified to have HIV.

What is involved in

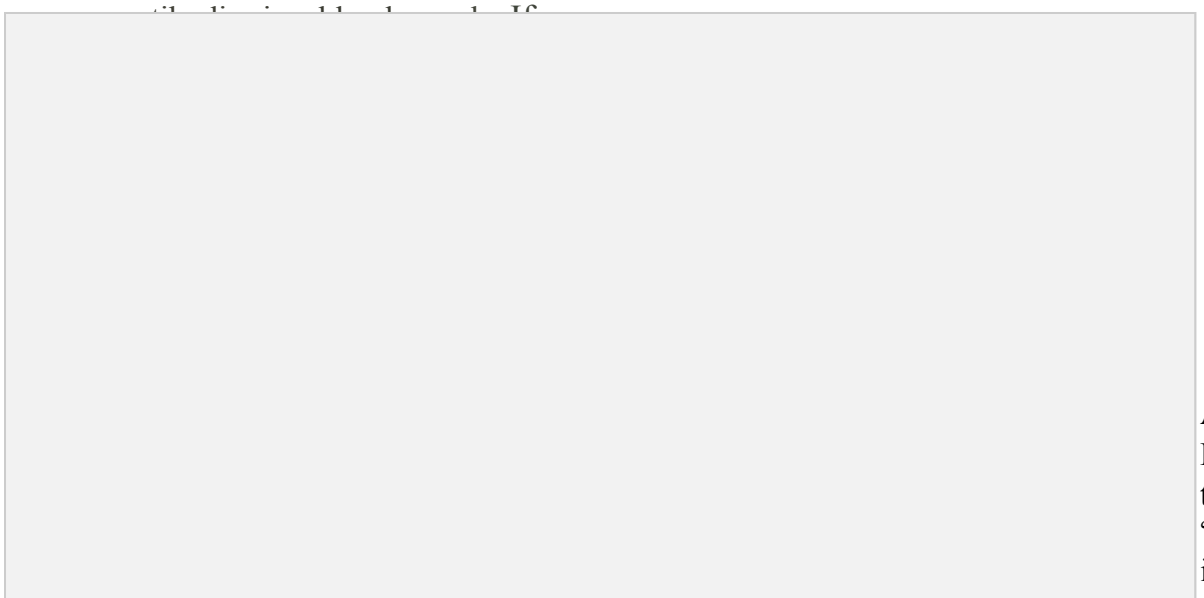
HIV testing?

The most widely used tests to detect HIV infection are those that look for anti-HIV antibodies in the blood. There are now newer tests involving polymerase chain reaction ***(PCR)*** that detect parts of the virus itself but such tests are still too expensive for widespread use.

How reliable is HIV antibody testing?

There are possibilities of both false positives and false negatives. This is why the initial screening test is usu ally conducted twice. If the person being tested is found positive during both screening tests, a confirmatory test is conducted,

The initial screening is usually an ***EZA or ELZSA*** ***-linked immunosorbent (enzyme assay) test, or a Par ticle Agglutination (PA) test*** while the second, confirmatory test usually involves ***Western blot analysis or Zmmunofluo rescence (IF) tests.*** (In other countries, another confirmatory test is called the radio immuno precipitation assay ***or RIPA.)*** All these tests are designed to detect

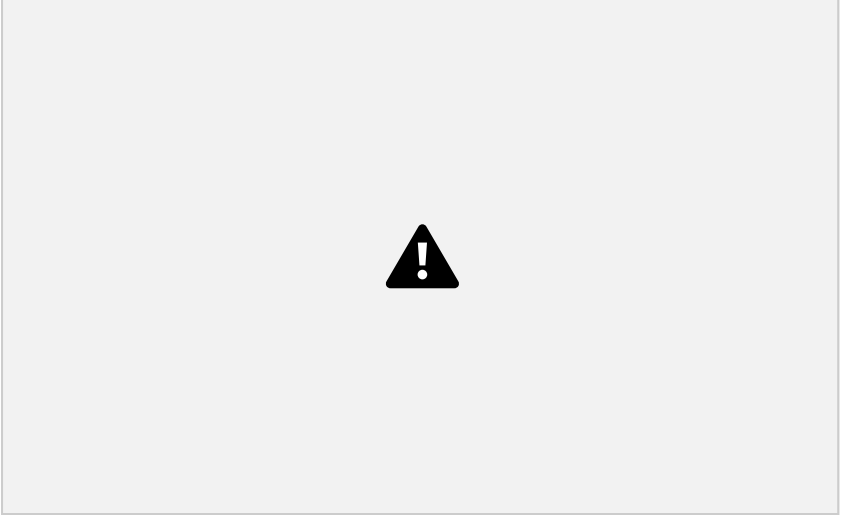


A problem associated with HIV antibody testing is the "window effect" described in

Module **5.** In many cases, an infected person does not pro duce anti-HIV antibodies immediately. This “window effect” can result in a false negative. Two negative test results *six* months apart, with no exposure in between (e.g. not receiving blood transfu sions and not engaging in unsafe sex) would establish more clearly that a person has not been infected.

Among infants born to in fected mothers, a positive antibody test does not neces sarily mean the child has been infected. The positive test result may be due to an tibodies from the mother passed to the infant during pregnancy. Repeated testing until the child is 18 months old may be necessary to estab lish if an infection has oc curred. If the child still has HIV antibodies, this may be due to his or her own produc tion of antibodies in response to **HIV** infection.

HIV antibody testing algorithm



Where can one get an HIV antibody test in the Philippines?

The Department of Heal and severz tions condtct the tests. is Department of Health institutions which claim to be

private in6 Lu advisable to check with the about the rkliability of private accredited.

Testing should always be voluntary; a point that will be further explained in Module ,9. The tests should be conducted with full anonymity and confidentiality. Anonym ity means that no names are recorded. This may not always be possible because some people have to take the test as a requirement for overseas employment. In such cases, the testing clinic should take all efforts to assure confidentiality, meaning test results should never be released indiscriminately.

and post-test counselling are also important.

'What does

pre-test counsel I i ng i nvo lve ?.

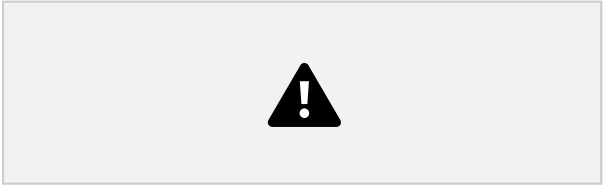
a Pre-test counselling involves an exchange of information 'to help a person decide whether or not he or she wants to take an HIV antibody testing. Counselling alsb prepares the person for the test results.

Good pre-test counselling is given by a trained individual and involves:

1 . ***Basic HIV*** | ***education.*** Quite often, the counsellor has to explain the difference between HIV and AIDS: trans- Lr -**mission and prevention.

:,*An explanation of what the HIV antfbody test Is, em it is not a test o£ AIDS. The meanings of a posi negative result are included.

. ***Risk assessment.*** Has the person really had risks of 6xposure to HIV through sexual intercourse; sharing of needles and syringes in injecting drug use, or through receiving blood transfusion?



What is post-test counselling?

In post-test counselling, the counsellor explains that a negative result may not necessarily mean that the per son is not infected. Neither does it mean that the person is "immune" from HIV. If the test yields a positive result, the counsellor explains what needs to be done next, including referrals to organizations for medical and so cial support.

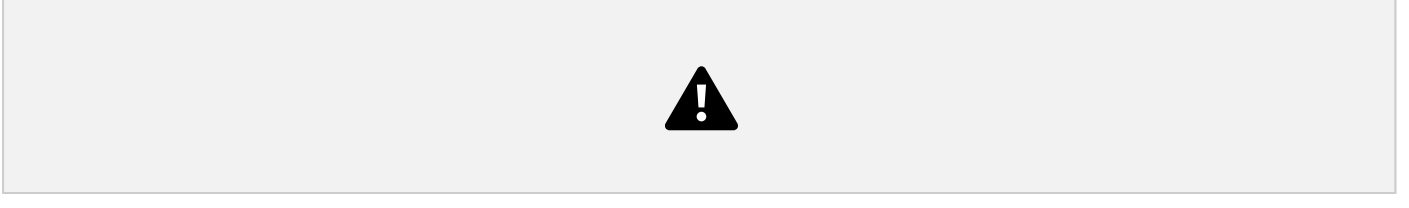
Are there ways of diagnosing AIDS without laboratory tests?

The World Health Organization has special 'definitions of AIDS for use in developing countries. AIDS in an adult is defined by the existence of at least two "majo signs" such as rapid weight,loss; diarrhea or .fever, and one "minor sign" such as candidiasis;

coughing; rash or swollen,lymph nodes. These signs and symptoms must be seen in the absence of other known causes'of immunosuppression such as cancer or malnutrition. These definitions have been criticized as being too general but may still be important as a reminder to health workers that HIVinfection should always be considered as a possible explanation of persistent health problems in an individual.

What about HIV antibody tests that use ,saliva and urine?

In 1996, the TJS Food and Drug Administration approved several tests for detecting HIV antibodies in saliva and in urine. The tests involve taking a sample of saliva or urine and then sending these to a laboratory for testing. These tests have several advantages. One is that they involve body fluids that are non-infectious; thus the samples can be handled and transported without fears of contamination. Second, it is easier to take samples of saliva and urine.



nderstandinn HIV and AIDS

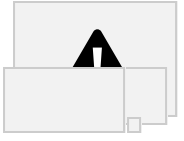
The relative ease for conducting the tests is also a disadvantage. There are fears that this will lead to more mandatory testing by employers, the police or even spouses. Since the samples can be taken even at home, there is the danger that pre-test and post-test counselling will be inadequate. Finally, the tests can confuse lay

people if saliva and urine can be used for testing, people may start to believe that these body fluids also transmit HIV. Health educators need to be aware of this problem and to reinforce messages that saliva and urine do not transmit HIV.

What are the *possible reasons for taking* HIV antibody tests?

There may be situations where an HIV antibody testing **is** indicated. For example, a patient with persistent prob lems that cannot be explained by other diseases may want to take the HIV antibody test.

In developed countries, people take the tests if they be lieve they have been exposed to HIV because early detec tion will mean they can start taking antiretroviral drugs early. However, in developing countries, a person who is



serious ethical problems about offering the tests. **A9** K

found HIV aositive will not have such access so there are

I

I. Most tests used to establish HIV infection involve a detection of

Drugs for HIV and

Is there a cure for HIV disease, What about the reported "All

Are there medicinc
prevent HI

Are alternative
being use

ure for
s?

What about the reported
"AIDS drugs"?

"AIDS drugs" refer to medicines that are used to treat, but not to cure, HIV infection. These medicines are some times referred to as "antiretroviral drugs." These work by inhibiting the reproduction **of** the virus. There are two main groups of antiretroviral drugs.

The first group consists of reverse transcriptase inhibi tors. As their name suggests, the drugs inhibit an enzyme called reverse transcriptase, which is needed to "Copy"' information needed for the virus to replicate. The approved reverse transcriptase inhibitors are:

ZDV or *zidovudine* (known also by the old name, azidothymidine or AZT and by the brand name Retrovir);

ddl or *didanosine* (also known as dideoxyinosine, deoxyinosine and by the brand name Videx);

ddC or *zalcitabine* (also known as dideoxy and by the brand name Hivid).

stavudine (also known as d4T; brand name Zerit)

lamivudine (also known as 3TC, brand name Epivir)

nevirapine (brand name Viramune)

A second group of drugs are called protease inhibitors. They work by inhibiting another enzyme called protease, which is needed for the assembly of viral particles. The approved protease inhibitors are:

saquinavir (trade name: Invirase)
ritonavir (trade name: Norvir)
indinavir (trade name: Crixivan)

The results from various drug trials are varied but there is growing evidence that therapy using several drugs might be effective in suppressing viral replication and in lengthening the period between infection and the developtment of AIDS. However, there are also a num ber of problems with the therapy:

1. Therapy needs to be initiated early before irreversible immunological damage. This means early diagnosis, which is not always possible.

2, Therapy needs to be sustained over a long-term. One estimate is that the drugs need to be taken at least three years in order for it to reach all the types of cells where HIV may be present. Studies also show that if therapy is stopped, the viral levels increase rapidly.

3. The drugs have a number of side effects, some of which can be serious. Even "milder" side effects, such as nau sea, are also problematic because they can hinder patient compliance.

4. Drug resistance develops rapidly. This is why several drugs need to be used together.

5. The most serious obstacle is cost. These drugs are extremely expensive and would be unaffordable for most people, even in developed countries. Zidovudine costs **P40** per capsule and the standard dose is **5** capsules per dav. which means a daily cost of P200 now show that treatment with one drug such as zidovudine, is often ineffective. initiated, and this further increases the c using three antiretrovirals can cost **US$20,0** e4

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also expensive. For example, to treat

for many Americans.

Other drugs are used specifically against **7** opportunistic infections and cancers, not against HIV and AIDS. These drugs are

one episode of candidiasis, a very com mon opportunistic infection, a patient would need at least 10 tablets of ketoconazole (200 mg, twice daily for **5** days). This costs around P 400.

Treatment of these opportunistic infections is often difti cult because people with HIV tend to develop adverse reactions to the drugs used for the infections. Simulta neous infections also complicate treatment.

Are there medicines

that can prevent HIV infection?

There are no medicines proven to be effective in prevent ing HIV infection. Taking antibiotics does not prevent HIV infection; neither does this prevent other sexually transmitted infections. Using antibiotics as a preventive measure is a waste of money because it does not work. Moreover, it is dangerous because misuse of antibiotics can contribute to the development of bacterial resistance against the drugs.

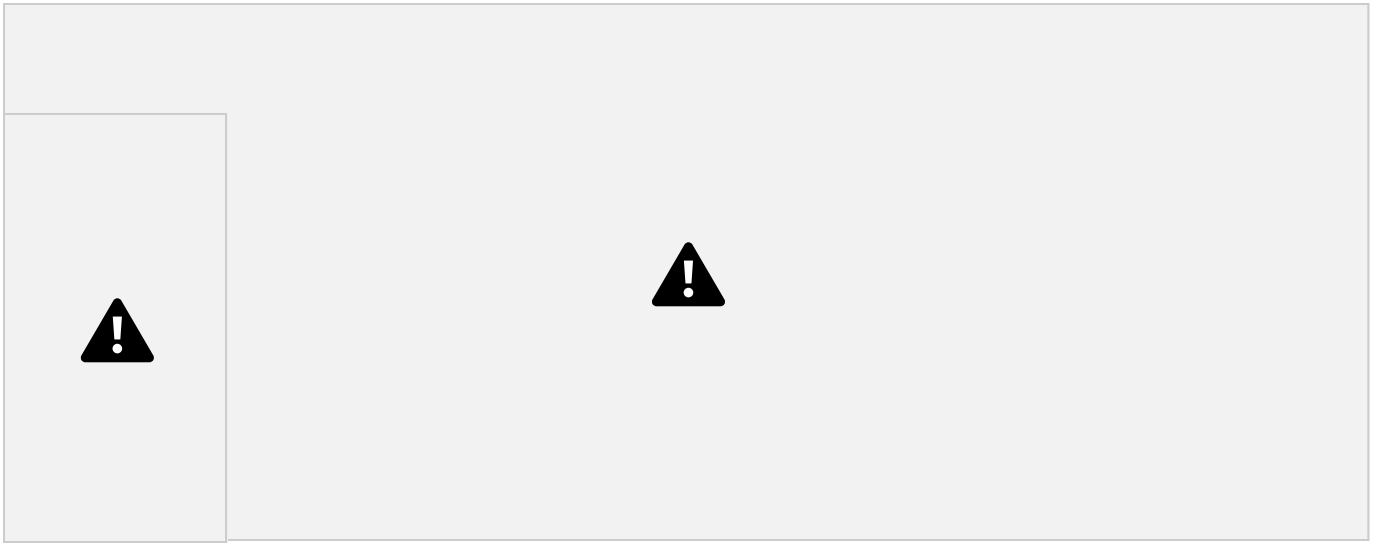
In developed countries, zidovudine is used as prophylaxis in two situations: (a) occupational exposure and **(b)** vertical transmission. For occupational. exposure (e.g., needlestick injuries), zidovudine given at **200** mg. every **3** hours for **3** days, then 100 *to* **200** mg. very **4** hours for the next 25 days. or vertical transmission, pregnant en with HIV are given zidovudine the last two trimesters. The new is also given zidovudine for after birth. This is said to reduce HIV transmission by approximately two thirds. How ever, the high cost of the drugs ts wider use of this treatment.

e search for a vaccine has yielded few encour

g results. Researchers are now looking for both therapeutic and preventive, vaccines. The therapeutic vaccines would be used on people with HIV in an effort to slow down the reproduction of HIV. Preventive vaccines would need to be developed against the various subtypes of HIV.

Are alternative medicines being used for HIV?

There is considerable interest in the use of “alternative medicine” for HIV. This includes the use of acupuncture; meditation; medicinal plants. None of these alternative therapies have been proven to “cure” HIV but they do seem to be useful for improving the quality of life of patients. Since HIV involves a destruction of the immune system, practices such as meditation may help as a lifestyle change that could slow down the progression of HIV infection.

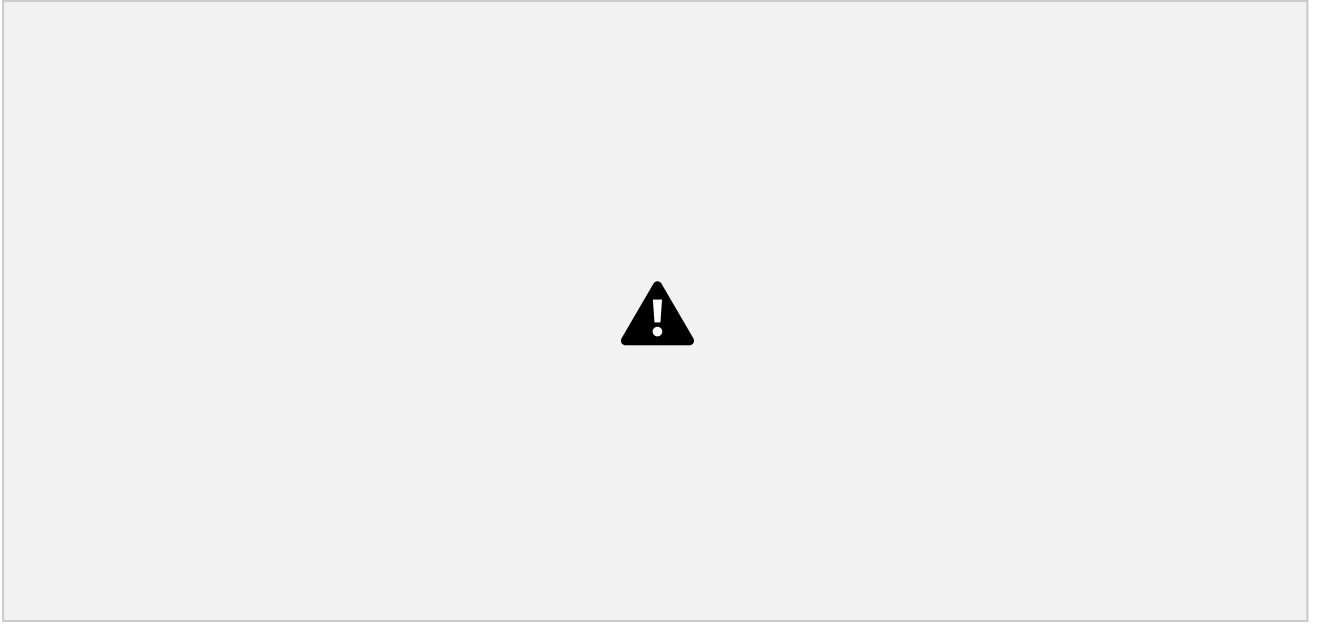


Summorv

I . There are no proven cures for HIV infection and AIDS. Existing drugs only slow down the reproduction of HIV. Other "AIDS drugs" are used against the opportunistic infections that occur in AIDS.

2. Antibiotics do not prevent HIV infection or any other sexually. transmitted disease. There are no medicines or vaccines proven to be effective in preventing HIV infection.

3. Even if treatments and vaccines become available, the HIV



tion and promotion remain the foundations for control. -4

pandemic will not necessarily come under control. Health educa

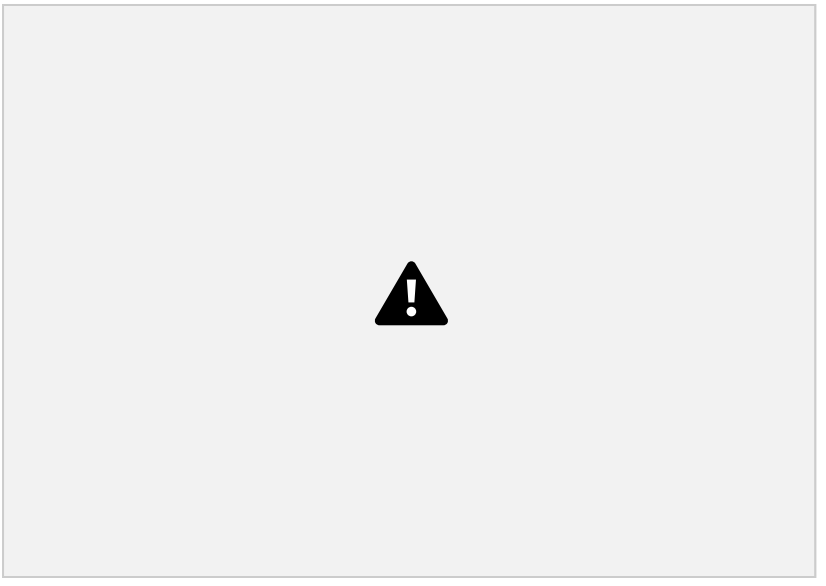
Shou

Shouldn't HIV antibody testing be made obligatory *as a way to prevent the spread of HIV?*

HIV is not just a biomedical problem. Society needs to act now to prevent the spread of HIV. Unfortunately, social responses are often based on misinformation. There have been several proposals from **our** politicians to require mass HIV antibody testing. This will not help to prevent the spread of HIV.

In another module, we have discussed the limitations of HIV antibody testing, particularly that of the window effect where antibodies may not show up immediately.

There are other problems with proposals to require testing either for the general population or for specific groups of people (e.g. sex workers). One would be costs. Mass HIV antibody testing is expensive. For example, there was a recent proposal to test all members of the Armed Forces of the Philippines for HIV. More or less it would have cost P20 million to test 100,000 members of the Armed Forces. If the HIV prevalence is 1 in 1000 (a high estimate), the testing would yield 100 soldiers with HIV or a cost of P200,OOO per identified soldier, to whom nothing would be offered by way of support after he or she is found to be HIV positive. The money for mass testing would be put to much better use entive educational programs.



Mandatory testing (includ ing testing in bars, where informed consent is often questionable) only drives people underground. In the former Soviet Union, com pulsory testing of ***4*** million pregnant women identified six HIV-positive women while voluntary anonymous testing of 19,000 people identified four. Promoting voluntary testing, based on personal risk assessment and counselling, is more effective than compulsory

testing only

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screening.
Compulsory
testing
and
mass

drive people
underground.
It also
creates

opportunities for corruption; there are already fake HIV certificates circulating around in the Philippines.

Shouldn't people with HIV and AIDS *be quarantined or isolated?*

HIV infection is not easily transmitted; therefore, quarantine is an inhumane and unscientific response. If society provides the opportunities, people with HIV and AIDS can live productive lives. Only one country in the world - Cuba - tried this method of quarantine. They had to give it up eventually because it was too expensive.

What can society do

to prevent the spread of HIV?

There are many things that society can do to help prevent the spread of HIV. But to be able to do this, there must be an openness to discuss the many issues surrounding HIV, especially sexuality. This does not just mean frank discussions about sex but must also extend into issues such as gender equality. As long as women are denied a voice in sexual matters, they will remain placed in high-risk situations.

Different sectors need to take their share of the responsibilities. Media needs to

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and accurately on HIV and AIDS. Educators need to inte grate into their curriculum, and to reach out through non formal channels to the majority of the population who are no longer in schools. Health professionals need to increase their own levels of awareness and knowledge, as well as examine their prejudices and values, to become effective health educators and health care providers.

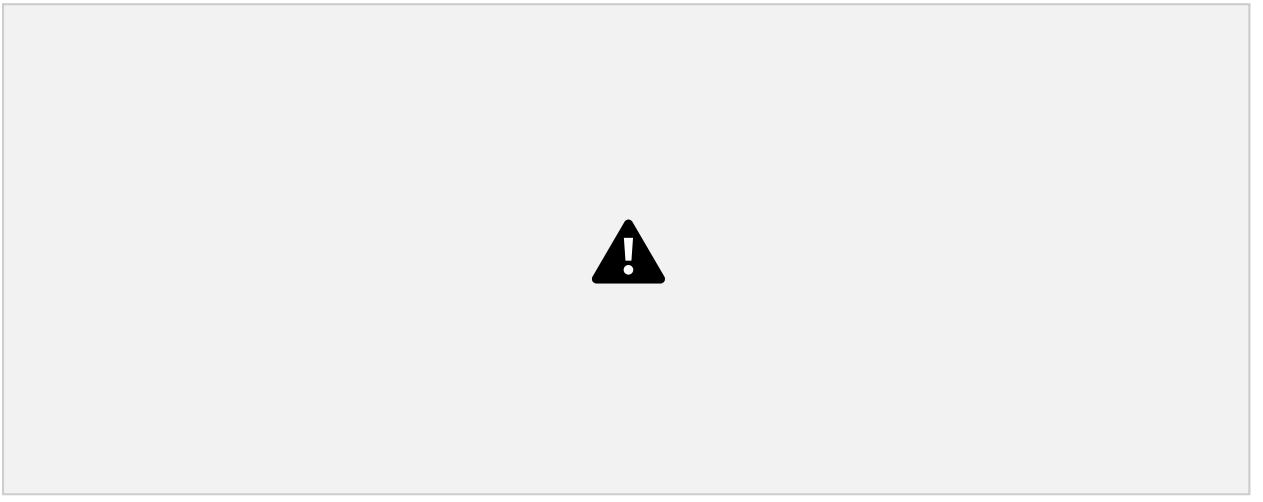
What about sutmort ProuDs

for people lid& witK HI+?

There is a real need in the Philippines to establish sup port groups for people with HIV and AIDS. Such support groups should however include proper training for volun teers. The needs are tremendous and include medical, psychosocial, and social welfare support. People can help in different ways, but should be realistic about what they can offer, rather than raising false expectations or worse, giving inappropriate programs because of poorly trained

staff or volunteers.

- Module 9:Appropriate Social Respons



2. Multisectoral responses are important for HIV prevention programs. This includes the provision of accurate information about HIV, as well as frank discussions of issues relating to sexuality.

What do we know about

sexually-related risks for HIV

in the Philippines?

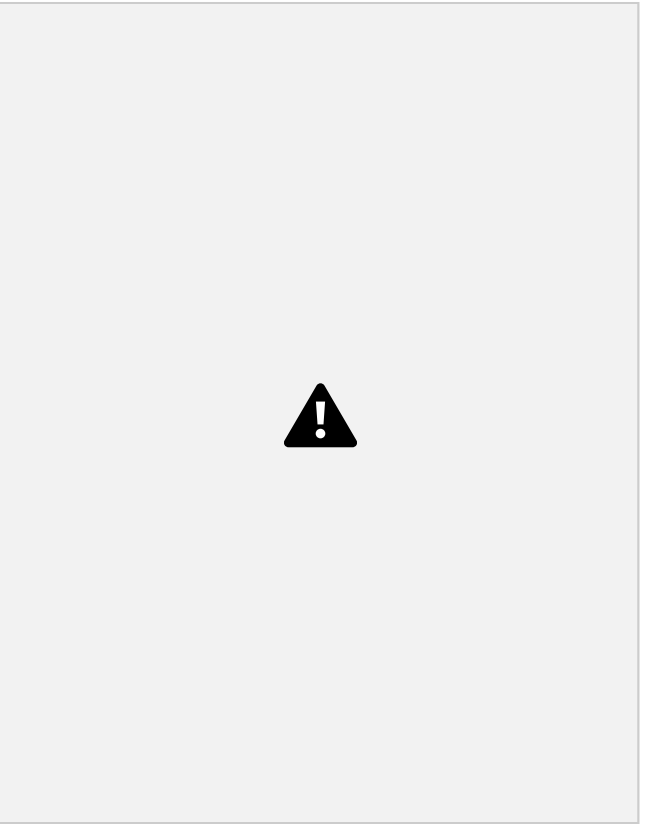
Since most cases of HIV transmission oc
we need to be aware of behavior that may relate to risks for HIV. Unfortunately, there is little of social and be havioral research on sex and sexuality in the Philippines. Sexuality is not just biological sex (i.e., male or female) but also includes gender identity; sexual orientation and the statuses and expected roles that are attached to gen der. The few studies that have been conducted do yield the following important information:

I. ***Early sexual intercourse increases the risks for HIV for many reasons.*** Some are psychosocial - young people may not be aware of the need to protect themselves from HIV. Others are biological -the female reproductive tract is not fully developed in an adolescent, and is more prone to injury and infection. The age of first sexual intercourse in the Philippines is higher than in the United States and Europe. The studies suggest that this occurs, on the average, at about the age of 17 for males and **20** for females. This may be lower in rural areas, and in out-of school youth. The National Demographic Survey of 1993 found that by the age of 19, about a fifth of Filipino women already have children. Early sexual intercourse is not necessarily pre-marital; in many cases, this occurs within marriage.

2. ***Commercial sex (sex for pay) exists.*** The clients are usually mex who have started to earn money. The num bers of women who do sex work vary from one place to another, but this now occurs in every province in the coun try. There are different types of sex workers: free-lance or establishment-based (e.g., bars, beer houses, massage parlors). There are fewer male sex workers but they are found in many cities. In many cases, sex work for both males and females may be occasional, such as when extra money is needed for tuition.

3. ***Casual sex exists.*** This may occur after meeting some one in a party or social gathering, or in a bar. Since the setting is different from commercial sex, both partners tend to consider the situation as risk-free and therefore do not take precautions.

ried men and others who think of them-



4. ***Sex between men exists and is not limited to people who self-identify as homosexual.***

"Men who have sex with men" include mar selves as "straight? or heterosexual. These encounters may be casual, taking place with "pick-ups" in a public place. Sex between men is not in itself necessarily risky for HIV but the lack of awareness about how HIVis transmitted may mean unprotected penetrative sex. Unfortu nately, there are few educational pro grams that talk about sex between men.

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How can behavioral change be promoted to preveKt HIV??

Three stages have been identified as being important in behavioral change to prevent HIV:

1. Recognizing that one's activities make oneself vulnerable to HIV infection.

2. Making a decision to alter the high risk behavior and implementing the decision.

3. Overcoming the barriers that block implemetation of that decision.

These three stages involve many complex psychosocial processes that involve correct knowledge about **HIV** trans mission; attitudes toward high- and low-risk activities; self-efficacy, locus of control and peer support. Many socio demographic variables are also significant in predicting the possibilities of behavioral change: age, sex, religion, educational background and generally, socioeconomic status.

Behavior change is not, however, a function of change of knowledge or attitudes alone, or even of a "change of values". People will need skills to be able to overcome the many structural barriers that prevent them from protect ing themselves. Women, for example, need to be able to "negotiate" for safer sex.

Why is behavioral change
often so difficult to achieve?

There are many structural factors that can block individual behavioral change. By structural factors, we refer to the influence society has on encouraging or inhibiting change.

We often forget that much of individual behavior is influenced by society. Sexual behavior, even if it seems so private and intimate, is in fact determined to a large extent by society. We "behave" in ways we think are acceptable. For example, if people believe that non-penetrative sex is not "real" sex, then they will insist on having penetrative sex even if it puts them at risk for HIV infection. If we believe that "it is natural for men to have many sex partners" then women will continue to tolerate their male partners' "extra-curricular" activities, even if this places them at risk for HIV infection.

Are there structural factors or variables that are particularly important
in influencing risk behavior in the Philippines?

From the research that has been conducted in the Philippines, some of the more significant psychosocial variables that relate to motivation for behavioral change in HIV prevention are:

I. Gender -Women generally have lower levels of awareness and knowledge about HIV. Because of skewed power relationships, they are also less likely to assert themselves for risk-reduction measures such as safer sex.

2. Socioeconomic status- Surveys generally suggest that people of lower socioeconomic status have less access to accurate information on HIV. Even those with access to information may not feel in control of their lives

and therefore may take up fatalistic attitudes (e.g. we all die anyway, so why worry about AIDS).

On the other hand, in surveys conducted in Metro Manila, we have found that men from higher socio-eco-

nomic groups may be more likely to enter situations where they put themselves and others at risk for HIV, e.g., by having unprotected sex with sex workers, or by injecting drug use.

Besides these socio-demograph variables, research shows that man dominant social attitudes and nor contribute to HIV vulnerability.

One example comes with acceptance of one's sexuality. A survey conducted among men who have sex with men in Metro Manila suggests that those who have guilt feelings about their homosexuality tend to engage more often in high-risk sexual activities. The Library Foundation, which has conducted workshops for more than 500 men who have sex with men, also has studies showing that participants who have problems with their sexuality also tend to fare poorly in terms of changes in knowledge about HIV and AIDS. Apparently, these problems of sexuality can be serious enough to block the learning processes.

Generally, judgmental attitudes and scapegoating only contribute to the epidemic's spread. Scapegoating means the blaming of particular groups for a problem like HIV. Thidia~~fKEeEi~~~ting- such as sex workers .- are further driven underground, making it more difficult for educational campaigns to reach them. In addition, scapegoating results in denial .- people begin to believe that "only" sex workers can get HIV and therefore do not recognize their own risks for infection.

How do we address these psychosocial issues in our IEC straiedes for HIV prevention?

Generally the following "rules" should guide us in planning the style and content of IEC (Information, Education and Communication) campaigns:

1. ***Know your target audience.*** Different population groups will need different communications approaches. Whenever possible, conduct quick surveys on your target group's level of knowledge, attitudes, behavior. Learn the culture and language of your target group. It is difficult to generalize about a "Filipino" culture .- we have subcultures bap~ed on class, gender, religion, region and all kinds of social and demographic variables. Respect existing values, belief's, and practices, but also be prepared to help

people to critically analyze and challenge the basis of these existing norms.

2. Mix micro- and macro-media strategies. Macro media messages (e.g. television plugs, billboards) help in getting general messages across, or in calling the attention of people to a problem, but there is also a greater risk of misinterpretation and distortion of messages. Micro strategies, such as small workshops and seminars, are important for communicating details about HIV prevention and relating the campaigns to personal life situations. Use innovative and participatory methods such as theater and role playing, contests and games.

3. Avoid fear tactics. Messages such as "AIDS Kills" and "Don't Die of Ignorance", or the use of photographs showing morbid lesions of people with AIDS, are generally useless. At best, fear motivates behavior change only for a short period. In a country like the Philippines, where life is short and difficult, fear tactics do not provide a sound foundation for motivating behavioral change. Increasing anxiety over HIV and AIDS through fear tactics can be c ing to a feeling ignation.

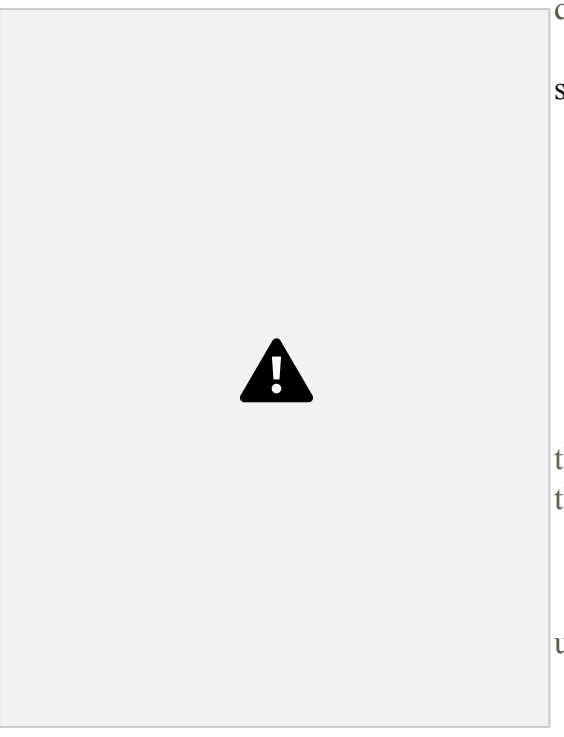
Fear tactics, together with poorly designed materials, can also lead to unnecessary anxieties, including over interpretation of "signs" such as weight loss or diarrheas.

4. Avoid judgmental and moralistic messages. Victim-blaming and moralistic messages are as useless as fear tactics in promoting behavioral change. This includes attributing HIV and AIDS to "divine punishment". Such tactics create a false sense of complacency among those who think of them-

selves as “moral” while alienating those who are tagged as “immoral”. Using stereotyped words such as “good time girls”, “faggots”, “AIDS-afflicted victims” are also counter-productive since they reinforce stereotyped images. Materials should not reinforce discriminatory at titudes such as those that blame women *(sakit* ***ng*** *babae)* or that make fun of groups such as homosexuals.

5. ***Be consistent and concise.*** Messages should be consistent and accurate. Avoid the use of vague words such as “body fluids” and “dirty needles”.

6. ***Do not mix messages from different campaigns.*** With the current trend toward integrating HIV/AIDS and STD’ education, people can easily get confused with conflicting messages. For example, in STD education the emphasis is on early detection and through identification of signs and symptoms (syndromic management). This cannot be done with HIVlAIDS because of the long asymptomatic period. Make sure that you do not confuse the messages here: HIV is very different from other sexually transmitted infections.



7. ***Use positive statements.*** Rather than emphasizing what not to do, health education should concentrate on what people can do to reduce a problem. Short, catchy messages conveying the message “We can control HIV” should be a theme in any campaign.

8. ***Givepractical advice.*** Asking young married people to “just say no” to premarital sex is not practical advice. A more realistic approach is to encourage postponement of premarital se as long as possible, and to emphasize that

sexual relationships can also be meaningful. Among sex workers, advice to "stick to one partner" is not only unrealistic, but also dangerous because they may think that they do not need to protect themselves with a special regular partner. Unrealistic messages in educa tional campaigns often lead to "cognitive repression," where the individual accepts only one messageand goes on doing what makes them most socially acceptable.

9. Provide hierarchial messages ***of*** choices. This relates to the preceding point about giving practical ad vice. People need to be given a range of choices. If you can't do this, then you might want to try other measures. The ABC formulation (abstinence; being faithful; condom use) is an example of such a hierarchial message.

10. Provide a comprehensive package ***of*** services. It is not enough, for instance, to just distribute condoms without explaining how to use them correctly. Neither is it advisable to encourage people to take HN tests if you cannot provide the necessary pre-test and post-test coun selling and support. Educational programs also need to be sustained .- one lecture may not be enough to tackle all the issues.

11. Monitor and evaluate yourprojects. No health promotion project can be perfect from the beginning. Constantly monitor and evaluate your programs together with the "target group" and be ready to revise materials and methods. Eventually, by using participatory methods, the distinction between "educators" and "students" should disappear and you will work together as a team.

Again keep in mind that as HIV/AIDS is integrated into **STD** and family planning education, mixed and contra dictory messages may be produced. This makes monitor ing very important.

12. Recognize the limitations ***of*** targeting indi vidual behavioral change. Behavioral change involves much more than a "change of personal values". The determinants of behavior are much more complex. Empowerment for change is never solely an individual

matter .- draw in peer groups and encourage community and collective efforts to overcome the obstacles to change.

As the Ottawa Charter for Health Promotion states: Health promotion is the process of enabling people to increase control over and to improve their health.

Moral and Ethicc'

Does a health professional have the to attend to a person with

Should a woman with tl

What abc Isn't the use of

Don't condoms promote promiscuity contribute to the spread

Arent we denying the issues of morality "promise(Is everything relat

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Isn't HIV/AIDS a medical matter?

Why talk about moral and ethical issues?

It is impossible to separate medical issues from other social, moral, and ethical concerns. For example, a health professional must confront such ethical issues as:

(a) the obligation to provide objective and accurate information on HIV/AIDS, especially on the efficacy of condoms;

(b) the obligation to care for patients with HIV/AIDS, including the provision of counselling and social support;

(c) the protection of patient confidentiality;

(d) the responsibility to protect others from HIV infection through provision of accurate information;

(e) the decisions about therapeutic measures and terminal care.

The ethical questions that health professionals face apply as well to non-health professionals doing HIV/AIDS work. A health professional must be ready to provide accurate information about the efficacy of condoms, even if his or her religious beliefs go against its use. Withhold-

.ing information or Jspreading misinforma tion about condoms may endanger lives.

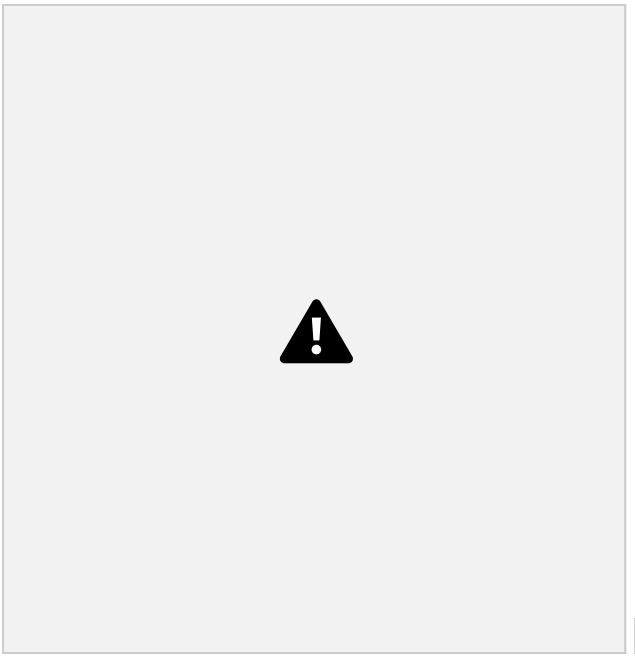
As HIV/AID programs proliferate, we begin to

face many ethical issues including the growing problem of AIDS profi teering or the exploita tion of the HIVlAIDS issue, and people with HIV or AIDS, to advance personal, religious, or political interests.

Does a health professional have the right to refuse to attend to a person with HIV orAEDS?

Professional codes of ethics exist for most health professions. All forbid professionals from refusing to treat a patient. Quite often, refusal to treat is based on discrimination against the patient because the patient is a sex worker, or a homosexual. In such cases, it may be better to get another health professional who would not have such prejudices.

Should a woman with HIV be allowed to get pregnant?



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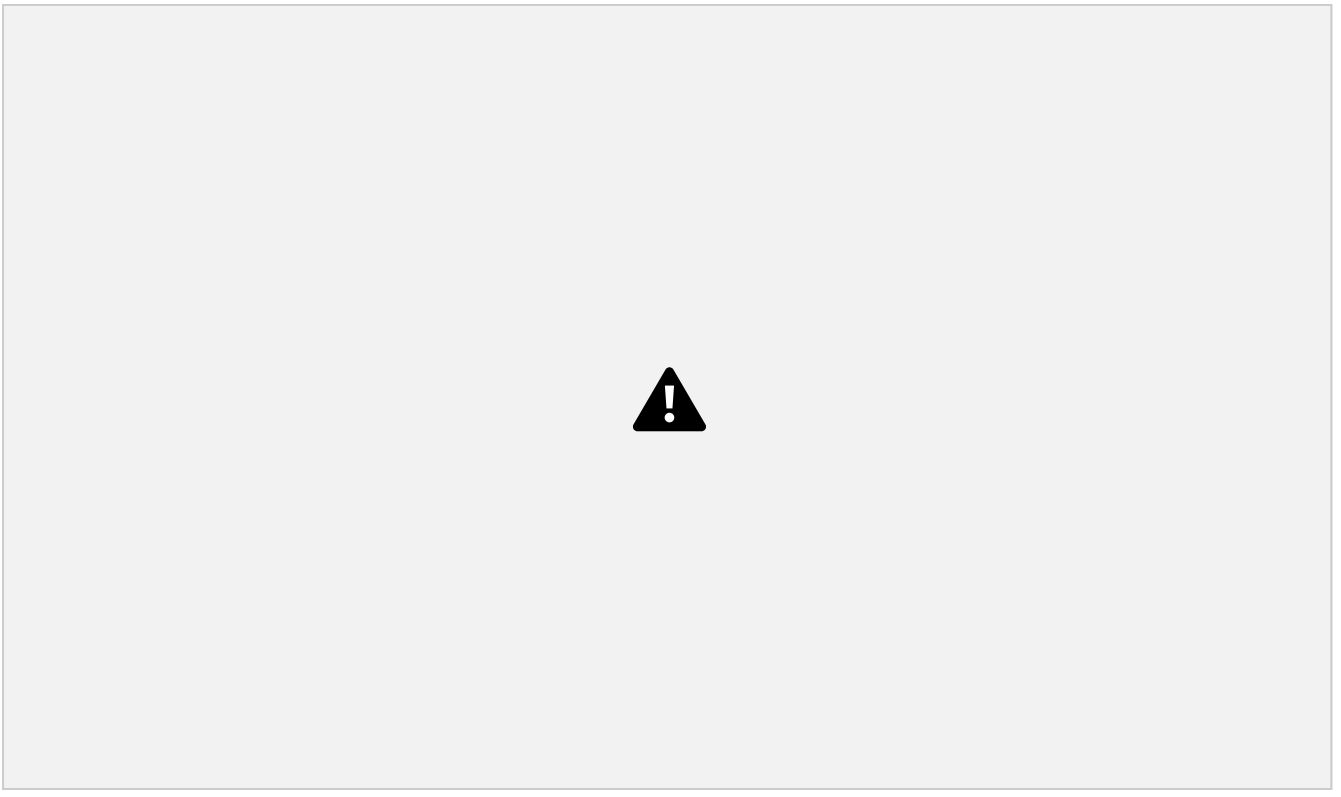
No one has the right to “allow” or “disallow” someone else’s pregnancy. A woman’s decision to become pregnant is her choice. The chances of an infected woman transmitting HIV to her child (during pregnancy or during delivery) is from 20 to 40 percent. The pregnancy itself might affect her own condition by inducing a fall in T4 lymphocyte counts to the point where opportunistic infections may become more likely. A woman with HIV should be informed of these risks but the final decision to become pregnant should be her own.

What about condoms?

Isn’t the use of condoms a sin?

All HIV/AIDS prevention programs must respect people’s religious views. There are sectors within the Roman Catholic church that say the use of condoms is wrong. We cannot force people to go against their beliefs.

However, respect must be mutual . people who believe



people. There are Roman Catholics, including priests and nuns, who endorse condoms as contramortives (anti-death) rather than as contraceptives. The debates within the Roman Catholic church will continue and many will have to act on their conscience. All the other major world reli gions - Protestantism, Judaism, Islam, Buddhism, Hinduism. do not prohibit the use of condoms or, for that matter, contraception.

Don't condoms promote promiscuity

and therefore contribute to the spread of HIVIAIDS?

"Promiscuity" is a relative term, especially in relation to HIVIAIDS. **A** person may be totally faithful to his or **her** partner and still get HIV/AIDS while another person may have many sexual partners and still not get HIV/AIDS. To equate "promiscuity" with HIV/AIDS is dangerous because it leads to complacency among people who do not think of themselves as "promiscuous".

As for the issue of condoms promoting promiscuity, which we will interpret as having "many" sexual partners, there is no evidence to show that the promotion of condom use has resulted in promiscuity. On the contrary, condom promotion campaigns have made people more conscious

of the need to be more responsible in their sexual behavior.

A recent review of sex education programs in the **US.** found that the most effective programs were those that focused on specific goals (e.g., HIV prevention), were tailored to the age and experience of young people, used participatory learning approaches and realistically addressed the social pressures on adolescents to have sex. Another study found that there is no evidence that providing practical information and contraception leads to sexual risk-taking; in contrast, there is some evidence that education directed toward chastity alone may encourage sexual experimentation.

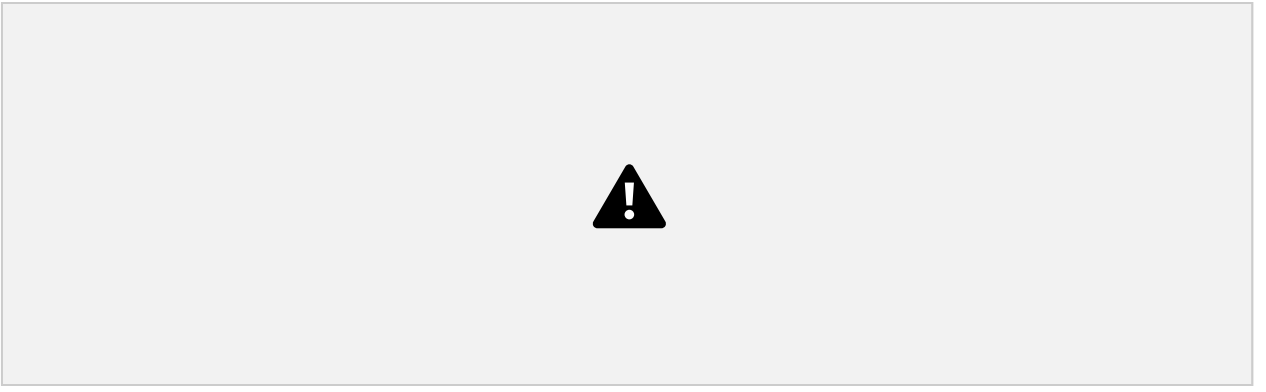
No doubt, programs to prevent HIV should not be limited to condom distribution alone. Instead, there must be information and discussions about many other issues relating to sexuality; gender relations and other issues that will empower people to make responsible decisions.

Aren't we denying the need to discuss issues of morality by arguing that "promiscuity" is relative?

Is everything relative in morality?

It is one thing to moralize, and another to have a moral stand. Moralizing is often bigoted, labelling others as "immoral" and blaming them for problems such as HIV/AIDS.

The problem of HIVIAIDS challenges us to take moral stands without moralizing. It challenges us to question the exploitative circumstances of the

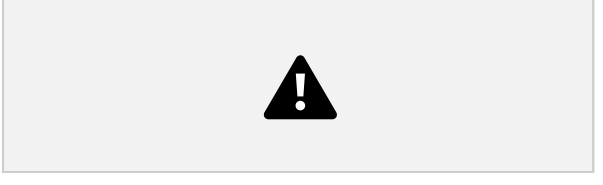


sexually prostituted. It challenges us to question skewed power relation ships that prevent one sexual part ner from protecting himself or her self (more often, herself) from IIIV.

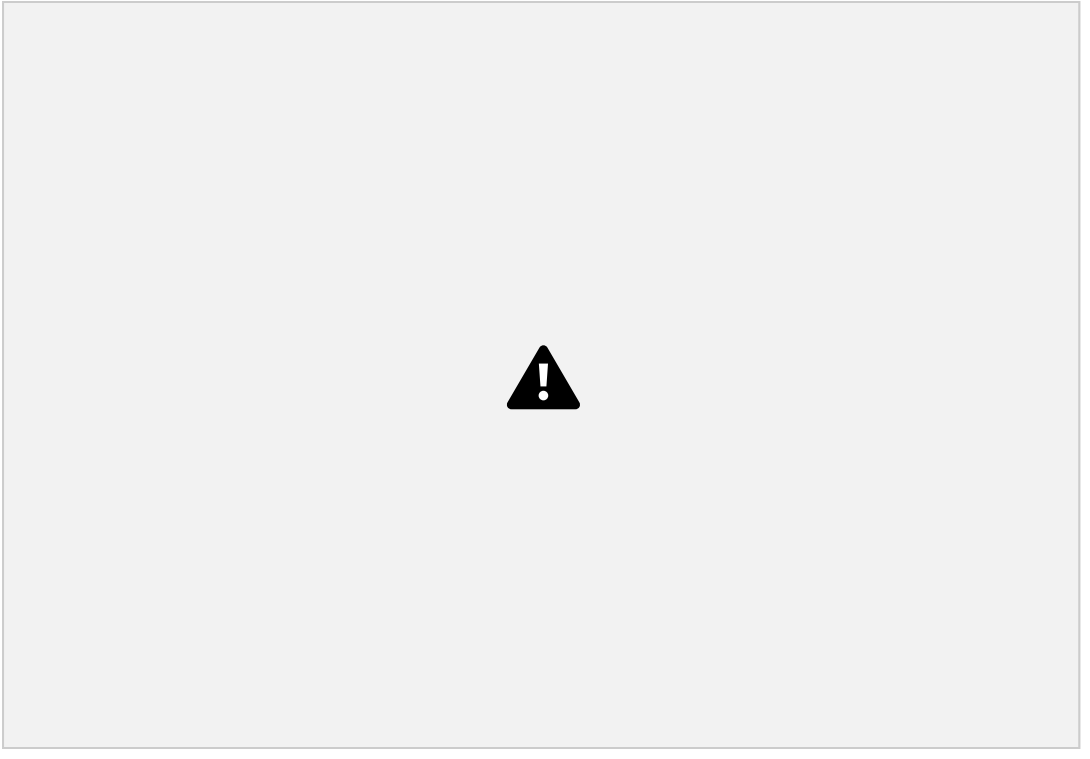
challenges us t confront questions of social justice. **A** first step in preventing the fur ther spread of HIV/AIDS is que tioning why the poor are put at ri *A*

sions about sex and sexuality. *

Finally, HIV/AIDS



by the double standards in health care; the lack of funds for such basics as screening of our blood supply; and the general lack of support for providing health education. Beyond health policies, we also need to look into broader economic and political issues such as the stringent impo sitions of the International Monetary Fund's structural adjustment program, which has resulted in restrictions on government spending (which means social services



being sacrificed first); removal of government subsidies on basic food items, and moves toward privatization of essential services. We are not dealing with high-risk ed into situations that

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.means asking all these ques fins and insteadof blaming others, takhg

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Philam Homes, Quezon City 1104 Philippines
Tel : 929-8805
Fax : 927-6760
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Or

Casa Plaza Building
Rm. 207 Casa Plaza Bldg.
Gen. Luna & Iznart Sts. 5000 IloIlo City, Philippines
Tel : 336-26-55
Email: hain-ilo@mozcom.com

NnTIoNnLAIDS/STD PREVENTION AND CONTROL PROGRAM
Building 12, Department of Health San Lazaro Compound
Sta. Cruz, Manila, Philippines
Tel
: 711-66-93 or 743-83-01 loc 2256/2257
Fax : 711-66-93

Those interested in supporting people living with HIV/AIDS can contact:

PINOV PLUS
C/O Bahay Lingap
San Lazaro Compound
Sta. Cruz, Manila, Philippines
Tel : 732-37-76 loc 47

Select References

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