

DAY 1

© HIV/AIDS - Basic facts

Day 1 presents an overview of the scope of the HIV/AIDS epidemic, the disease and its manifestations, and the multitude of factors underlying the epidemic. Participants are encouraged to consider their own attitudes towards HIV/AIDS and people living with HIV/AIDS and also their feelings on discussing sex candidly.

Learning objectives

By the end of Day 1, participants will be able to:

- © Critically consider their attitudes to HIV/AIDS
- © Have an awareness of the extent of the epidemic
- © Understand how HIV affects the immune system and the body
- © Explain the phases of the disease and the difference between HIV and AIDS
- © Describe the transmission routes
- © Describe biological factors that increase risk to HIV infection
- © Analyze socio-economic factors that increase vulnerability to HIV infection
- © Understand the role of individual, community and societal influences on vulnerability



Manual:

- ⊗ International Rescue Committee. (2003) Protecting the Future: HIV Prevention, Care and Support Among Displaced and War-Affected Populations. Chapters 1, 2 & 3.

Handouts:

- ⊗ Adapted from: UNAIDS. (2002) Report on the Global HIV/AIDS Epidemic. Table of country-specific HIV/AIDS estimates and data, end-2001. www.unaids.org/html/pub/Global-Reports/Barcelona/BRTTableCountryEstimatesEnd2001_en_pdf.pdf
- ⊗ From: WHO. (2004) Scaling up antiretroviral therapy in resource-limited settings: treatment guidelines for a public health approach: WHO staging systems for HIV infection and disease in adults, adolescents and children. www.who.int/entity/3by5/publications/documents/arv_guidelines/en

Additional resources:

- ⊗ Reproductive Health Response in Conflict Consortium. (2003) Monitoring and Evaluation Toolkit. Draft for field testing. The Causal Pathway Framework. www.rhrc.org
- ⊗ UNAIDS. (1998) HIV-related opportunistic diseases. www.unaids.org/html/pub/publications/irc-pub05/opportu_en_pdf.htm
- ⊗ ICASO. (2003) The Science of HIV/AIDS Vaccines. www.icaso.org
- ⊗ WHO. (Revised March 2004) Fact sheet no. 104. Tuberculosis. www.who.int/mediacentre/factsheets/fs104/en/print.html
- ⊗ UNAIDS. (2003) Questions and answers. www.unaids.org/html/pub/una-docs/q-a_ii_en_pdf.htm
- ⊗ EngenderHealth. (2001) HIV and AIDS online minicourse. www.EngenderHealth.org



PowerPoint:

- 1.3a Definitions, immune system, history
 - 1.4a(i) Measuring the epidemic
 - 1.4a(ii) UNAIDS epidemic update 2003
 - 1.4a(iii) Regional prevalence 1986-2001
 - 1.5b(i) Timeline of HIV/AIDS
 - 1.5b(ii) Symptoms and signs, diagnosis, opportunistic infections
 - 1.6a Transmission routes
 - 1.7a Biological risk factors
 - 1.7d Disasters maps
- Teaching aids Day 1



Posters:

Examples in teaching aids Day 1 and HIV tree:

- ⊙ Immune system army (Show with 1.3a)
- ⊙ Timeline of HIV/AIDS (Show with 1.5b(i))
- ⊙ Transmission routes (Show with 1.6a)
- ⊙ Vulnerability areas (Show with 1.7e)
- ⊙ HIV/AIDS tree: lower branches, roots, fertilizers, soil



Audio-visual:

- ⊙ Video: Pandemic: Facing AIDS
- ⊙ Video: Guilty

Other:

- ⊙ A4 sheets of colored paper
- ⊙ Gideon Mendel: "A Broken Landscape: HIV and AIDS in Africa". (2001) M&G Books, Auckland Park, South Africa. Case studies from: pp. 14-19; 22-23; 54-54; 69-69; 80-81; 130-131; 132-133; one set per table of 5 or 6 participants.
- ⊙ Cards for transmission picture card game
- ⊙ HIV epidemic game: glasses or clear plastic cups, white vinegar, water, phenol red, instruction cards

DAY 1 – Session plan

| Time | Topic | Materials |
|----------------------------|---|--|
| 60 min 15 min | 1.1 Introduction 1.1a Course introduction 1.1b Activity: <i>Why don't people talk about sex?</i> | Flipchart; map |
| 25 min 30 min | 1.2 Exploring attitudes 1.2a Activity: <i>Exploring our own attitudes</i> 1.2b Activity: <i>Challenging our attitudes</i> | A4 colored sheets; flipchart Video: <i>Pandemic: Facing AIDS</i> |
| 30 min | Break | |
| 25 min | 1.3 HIV/AIDS – Basic facts 1.3a Presentation: <i>Definitions & immune system</i> | Immune system army poster; PowerPoint |
| 30 min | 1.4 What is the extent of the HIV/AIDS problem? 1.4a Presentation: <i>Measuring the epidemic</i> | PowerPoint; flipchart |
| 30 min 40 min | 1.5 How does HIV/AIDS affect the body? 1.5a Activity: <i>Identifying physical manifestations of HIV/AIDS</i> 1.5b Presentation (i): <i>Timeline of HIV/AIDS</i> Presentation (ii): <i>Symptoms & signs, diagnosis, opportunistic infections</i> | Case study handouts from "A Broken Landscape"; flipchart PowerPoint; Timeline of HIV/AIDS poster; HIV/AIDS tree: lower branches PowerPoint |
| 60 min | Lunch | |
| 10 min 25 min | 1.6 How do people get HIV? 1.6a Presentation: <i>Transmission routes</i> 1.6b Activity: <i>Transmission picture card game</i> | PowerPoint; Transmission routes poster HIV/AIDS tree: roots Flipchart sheets; picture cards |
| 10 min 25 min 15 min | 1.7 Why do people get HIV? 1.7a Presentation: <i>Biological risk factors</i> 1.7b Activity: <i>The concept of spread of disease: epidemic exercise</i> 1.7c Activity: <i>Illustrating spread of disease</i> | PowerPoint – HIV/AIDS tree: fertilizers PowerPoint; instruction cards, water, white vinegar, phenol red, glasses Video: <i>Guilty</i> |
| 15 min | Break | |
| 50 min 10 min 30 min | 1.7d Activity: <i>"But why?" exercise</i> 1.7e Presentation: <i>Organizing the vulnerability factors</i> 1.8 Conclusion | Casestudies; Flipcharts; PowerPoint HIV/AIDS tree: soil Vulnerability areas poster Post-tests |

1.1 Introduction



1.1a Getting started

- ⊙ Welcome
- ⊙ Logistics
- ⊙ Participant and facilitator introductions. If possible, create a map so people can show where they work and offer a 2-minute description of the work they do.
- ⊙ Course overview
- ⊙ Introduce idea of individual objectives: participants are encouraged to formulate a daily objective and activities, relevant to their work settings, based on topics covered during the day. (Refer to handout: *The Causal Pathway Framework*.)
- ⊙ Code of conduct
- ⊙ Select host team for the day
- ⊙ Pre-test
- ⊙ Brief overview of the day. (*Daily course objectives are written on a flipchart sheet and become part of the wall display for the day.*)



Activity

1.1b Why don't people talk about sex?

Discuss in small groups.

Discussion - 5 minutes. Feedback in plenary - 10 minutes.

Facilitator...

...introduces:

In this course we will frequently be discussing the subject of sex. People are often uncomfortable talking about sex. Why don't people like to talk about sex?

...notes:

Examples:

- ⊙ Discussing sex is taboo in many cultures.
- ⊙ Intimate subject: embarrassment because we have been trained not to talk about it in public.
- ⊙ Fear of seeming ignorant.
- ⊙ Fear of seeming immoral, etc.

...concludes:

In many cultures and for a variety of reasons, people are afraid or embarrassed to talk about sex. Yet sex is a very basic part of our existence. Sex is also a core issue in addressing HIV/AIDS. Unless people are prepared to talk openly about sex, it will be difficult to learn about HIV and to take action against HIV. If we are going to fight the enemy, we must acknowledge and understand the enemy.

We need to agree that, in this course, it is acceptable and necessary to talk about sex, because fighting the HIV/AIDS epidemic is important to all of us as responsible adults, professionals, partners, parents and community members. We also hope that after this course, participants will share with others the things they have learned and encourage others to break the silence. (Add "speak openly about sex" to code of conduct.)

1.2 Exploring attitudes



Activity

1.2a Exploring our own attitudes



Work in small groups.

Discussion – 10 minutes. Feedback in plenary: part 1: 10 minutes, part 2: 5 minutes.

Materials: Sheets of colored A4 paper; Flipchart

(Example in PowerPoint: Teaching aids Day 1)

Facilitator...

Part 1:

...introduces:

Many things are said about HIV and AIDS and about people who are living with HIV/AIDS (PLWA). For example, sometimes it is said "people who get HIV are immoral" or "if you are infected with HIV, you will die very soon" or "HIV is spread by the polio vaccine."

What are some of the things you have heard other people say about HIV/AIDS?

Participants write each point on a different piece of paper; use thick markers and half A4 sheets; these sheets are handed to the facilitator who reads them out and sticks them up on a large sheet of paper.

...concludes:

(Note: Are there common themes among responses to highlight?)

There are many misconceptions and negative attitudes about HIV/AIDS and about people living with HIV/AIDS. Think about whether you yourself hold or have in the past held any of these beliefs and attitudes (even just a little – be honest with yourself!). In this course we aim to increase your knowledge and, if necessary, change your ideas and attitudes. We will leave this poster of ideas and attitudes up for the duration of the course to serve as a reminder of some of the issues we need to deal with, in ourselves and in others. At the end of the course you will have a chance to consider if anything has changed about the way you feel about HIV/AIDS and PLWA.

Part 2:

Facilitator takes feedback in plenary and writes responses on a flipchart sheet which is placed next to the part 1 answers.

Sometimes people have particular views about refugees. What are some of these views?

...notes:

Examples: Refugees spread HIV into host communities; refugees are responsible for theft and banditry; refugees are an economic burden to the host country; refugees are a security risk; refugees cause increased workloads for staff in national facilities; refugees get more assistance than host communities; refugees are responsible for witchcraft; refugees should go home.

...concludes:

Refugees can be the subject of resentment, fear and unfair blame. Refugees with HIV/AIDS may thus suffer a double burden of stigma and discrimination, as a result of both their refugee status and their HIV status.



Activity

1.2b Challenging our attitudes



Video – 20 minutes. (Select excerpts totaling 20 minutes) Discussion in plenary – 10 minutes.

Materials: Video: Pandemic: Facing AIDS (order of countries profiled: Uganda, Russia, Brazil, Thailand, India)

Facilitator...

...introduces:

Think about how the people in this video challenge some of the things people say about HIV/AIDS and PLWA.

After the video, facilitator asks for comments on the video.

...concludes:

This video shows some of the challenges faced by PLWA. It also demonstrates that PLWA can live productive lives and make valuable contributions to society. It shows that they come from all segments of society and that PLWA are people just like you and me.

In the context of your work in the field of HIV, you will have to deal with your own attitudes as well as the attitudes of colleagues and clients. We are all human and we need to recognize that we all hold certain beliefs. You need to be aware of your own perceptions as well as the views held by those around you and to develop strategies for confronting them. Wrong information and negative attitudes increase the potential for the epidemic to spread and increase the suffering of people living with HIV/AIDS. In this course we are going to examine why this is so and give you some tools to help you deal with lack of information, incorrect information and negative attitudes.

1.3 HIV/AIDS – Basic facts



1.3a PRESENTATION: *Definitions & immune system*



Presentation – 25 minutes.

Materials: PowerPoint: 1.3a Definitions & immune system

Poster: Immune system army (Example in PowerPoint: Teaching aids Day 1)

HIV stands for Human Immunodeficiency Virus.

AIDS stands for Acquired Immune Deficiency Syndrome.

AIDS is caused by the HIV virus. A virus is a very small organism, called a micro-organism or sometimes a "germ." It can only be seen using a very specialized microscope called an electron microscope. Sixteen thousand HIV viruses can fit on the head of a pin. Viruses can get inside the human body, where they multiply to reach very high numbers and make the person sick. Viruses multiply by getting inside the cells of the body and use these cells as a "factory" in which to reproduce themselves. Examples of viruses that make people sick (Ask participants): the common cold virus, the polio virus, the measles virus, the hepatitis virus and more recently, the Severe Acute Respiratory Syndrome (SARS) virus.

(Explain first using immune system army poster, then repeat with PowerPoint.)

To protect itself against attacks by viruses and other micro-organisms, the body has its own defense system, called the immune system. The immune system consists of a number of different types of white blood cells and special blood proteins. We can think of the immune system as an army of cells trained to fight off any foreign organism that invades the body. A very important component of the immune system is a group of cells called CD4 cells, sometimes also called the T helper cells. These are specialized white blood cells, controlling the functioning of the immune system. We can think of these CD4 cells as immune system "army commanders." When a foreign organism enters the body, the CD4 cells give the command for the immune system to attack the invader. It may take some time (a few days or several weeks) for the immune system to build up an effective response to the invading organism, so initially the person may have some symptoms and signs of illness. But, after a while, the immune system is usually able to overcome the invader and the person recovers from the illness.

The immune system uses various methods to fight infections. Sometimes white blood cells directly attack the foreign organism. Another method involves the production of antibodies. Antibodies are proteins produced by certain white blood cells against specific organisms. These antibodies are used as "weapons" against invading micro-organisms in the blood.

For some viruses, like polio, measles and hepatitis, vaccines have been developed which prepare the immune system so that it can inactivate the virus quickly after it enters the body. This stops the virus from multiplying inside the body and therefore prevents the person from developing the illness. For other viruses, like the common cold and HIV, scientists have not been able to develop a vaccine yet.

When the HIV virus gets into the human body, it attacks the immune system. Although there are many different viruses that can cause illnesses in humans, HIV differs from these in that it is the only virus we know of that specifically attacks the CD4 cells. The HIV virus gets inside the CD4 cells and multiplies there. Up to 10 million viruses are produced daily. HIV gradually disables or destroys more and more of the CD4 cells. Without the commanders, the defense force is not able to defend its territory properly. The immune system also produces antibodies ("weapons") to combat the HIV virus, but they are not able to overcome the virus. These antibodies are usually what we measure when we do HIV tests.

Over time, the immune system gradually becomes increasingly weakened as a result of the HIV virus. We say the immune system becomes deficient or compromised, or the person is immunodeficient. This is the reason for the terms "human IMMUNODEFICIENCY virus" and "acquired IMMUNE DEFICIENCY syndrome." The word "ACQUIRED" is used because the immune deficiency is the result of something that "comes from outside into the body." (There are other causes of immune deficiency: In very rare cases, people are born with immune deficiencies, and certain kinds of cancer treatments also weaken the immune system; but HIV is by far the most common cause of immune deficiency in the world today.)

(Ask participants: What do you think happens to a person when their immune system is weakened?)

When the immune system is weakened, the body gradually loses its ability to fight off diseases caused by other micro-organisms, and so the person becomes vulnerable to many infections. People with HIV can contract the same infections as other people, for example, pneumonia or diarrhea or STIs, but they get these common infections more often and more severely.

As a result of the weak immune system, people with HIV are also vulnerable to certain infections that do not usually cause illness in people without HIV. Although these infections can get into the body of a healthy person, a healthy immune system destroys the infection easily and the person does not become sick. In a person whose immune system is weak, the infections have an opportunity to multiply inside the person and make them sick. These infections are called opportunistic infections, because they make use of the opportunity provided by a weak immune system. Examples of opportunistic infections include candida (infection of the mouth and throat), pneumocystis carinii pneumonia and cryptococcal meningitis. The weakened immune system also makes the body vulnerable to certain kinds of cancers, e.g., Kaposi's sarcoma, cancer of the cervix.

Because of the variety of infections and cancers that can affect a person with HIV, they can show a variety of different symptoms and signs. The word "SYNDROME" refers to a group of symptoms and signs that can all be part of the same underlying medical condition, in this case HIV/AIDS. We will explain this again when we look at how HIV/AIDS affects the body.

The difference between HIV and AIDS:

When the HIV virus enters the body, we say the person is infected with HIV or "has got HIV." When people with HIV show signs of illness, these are mostly caused by infections or cancers, and not by the HIV virus itself. When the person's immune system has been weakened to the point at which s/he is suffering severe opportunistic infections, we say s/he has AIDS. We will discuss this again later.

The difference between HIV1 and HIV2:

HIV1 and HIV2 are different types of the HIV virus. HIV1 is the most common type worldwide. Both are transmitted in the same way, but HIV2 is less infectious and HIV2-infected people stay well for a longer time after infection. HIV2 was first identified in West Africa, where it is common, but it has also been identified in other parts of the world.

The history of HIV/AIDS:

HIV has been around for many years. (*Ask participants if they know for how long.*) We do not know exactly how long the HIV virus has caused illness in humans, but scientists estimate the time at about 50 years. The first known case of HIV occurred in 1959 in a man living in the Democratic Republic of Congo. The virus was identified in a blood sample that had been stored by scientists for many years for other purposes.

Where did HIV come from?

(*Ask participants what they have heard.*) We are still not absolutely sure about the origin of HIV, but today scientists have a good idea. It sometimes happens in nature that viruses can transfer from animals to humans. For example, mad cow disease comes from cattle and SARS comes from civet cats. Scientists think that it is likely that HIV evolved from viruses found in monkeys. It is possible that one of these viruses transferred to humans from chimpanzees in Central Africa (HIV1) and from the Macaque or Sooty Mangabey monkey in West Africa (HIV2). This does not mean that scientists assume that people had sex with monkeys and chimpanzees; it is more likely that people first got infected through cuts on their hands when they were handling the meat of these animals (which they killed for food).

The AIDS syndrome was first recognized as a new disease in 1981 in the USA. In 1983, the HIV1 virus was identified by scientists in the United States. The HIV2 virus was identified in France the same year.

Over the years there have been many myths around HIV/AIDS. (*Ask participants for examples.*) For example, people have claimed that HIV does not exist, that it's a conspiracy to discriminate against Africans, that HIV does not cause AIDS, or that AIDS is caused by poverty, not by the HIV virus. However, there is by now overwhelming scientific evidence, from many studies in different places by different researchers, that HIV exists and that it causes AIDS. (For further details refer to additional resources: UNAIDS. (2003) *Questions and answers*)

1.4 What is the extent of the HIV/AIDS problem?



1.4a PRESENTATION: *Measuring the epidemic*



Presentation – 30 minutes total: 1.4a (i), (ii) and (iii).
Materials: PowerPoint: 1.4a (i) Measuring the epidemic
Flipchart

When talking about the severity of an epidemic, the words "prevalence" and "incidence" are often used.

What is prevalence?

The prevalence of a disease is the proportion or percentage of individuals in a defined population that has the disease at a specific point in time. Prevalence gives us a "snapshot" of the situation and is most often used to measure chronic diseases. For HIV, prevalence figures usually represent the sexually active population (aged 15 to 59 years).

$$\text{Prevalence} = \frac{\text{Number of people infected with HIV}}{\text{Population}}$$

What is incidence?

The incidence of a disease is the number of new cases occurring in a defined population during a defined time interval. It tells us how quickly the epidemic is spreading. Incidence is usually used to measure acute diseases.

$$\text{Incidence} = \frac{\text{Number of people newly infected with HIV over the course of one year}}{\text{Population}}$$

Draw on flipchart:

Incidence



Prevalence



Population



Which of these terms is more commonly used when talking about HIV/AIDS?

Prevalence includes both old and new infections. As it does not distinguish between people who were infected recently and those who were infected several years ago, it does not show recent trends in the epidemic. Because incidence measures new infections, it is useful in telling us about how quickly people are becoming infected currently. It is much more difficult to measure incidence (ask participants why), so most of the time we use prevalence. HIV prevalence in young people is sometimes used as a proxy measure for HIV incidence because young people have usually become sexually active relatively recently and so would have been infected recently. Changes in HIV prevalence among the age groups 15 to 19 years and 15 to 24 years can therefore be important in revealing new trends in the epidemic. For example, Uganda has seen decreasing HIV prevalence among young people in recent years, reflecting an overall slowing of the epidemic in the country.

How do we measure HIV prevalence?

Prevalence can be measured in different ways. These include: population-based surveys, sentinel site surveillance, e.g., antenatal clinic data, or data from blood donors or STI clinic clients. Population-based surveys provide the most accurate measurement of prevalence, but are complex and costly to carry out. Antenatal clinic data are considered to provide a reasonably accurate reflection of HIV prevalence in the sexually active population and are thus used as a proxy measure. Data from blood donors and STI clinic clients do not accurately reflect HIV prevalence in the general population. (Ask participants why this is so.) Blood donors and STI clients represent only a small fraction of the general population and may have specific characteristics which make them different from the population as a whole, e.g., injecting drug users may

donate blood for money to support their drug habit; people with STIs may engage in unprotected sex with high risk groups. HIV prevalence in these groups may therefore not be a good reflection of HIV prevalence in the general population. However, blood donor and STI client data can provide an indication of prevalence trends over time, especially where no other data are available.

Prevalence is usually measured through anonymous unlinked testing, which means that blood samples are stripped of all identifying markers before being tested and thus cannot be traced back to the individual. As the test is anonymous, consent is not required and people do not receive their results. For example, blood taken routinely in antenatal clinics for syphilis or Rhesus screening may be used.

Why is it important to know the prevalence of HIV in a population?

Prevalence gives an indication of the overall scale of the problem. This helps with planning of services, resource allocation, advocacy and raising public awareness. Over an extended period of time, changes in incidence and prevalence can illustrate whether or not prevention interventions were successful.

Classification of HIV epidemics

Low-level epidemic:

HIV prevalence is less than or equal to 5% in any defined sub-population (e.g., a core group)

Concentrated epidemic:

HIV prevalence is consistently over 5% in at least one defined sub-population (e.g., the military)

HIV prevalence is below 1% in pregnant women in urban areas

Generalized epidemic:

HIV prevalence is consistently over 1% in pregnant women



Materials: PowerPoint: 1.4a (ii) UNAIDS epidemic update 2003 (This information is updated on an annual basis and can be accessed on the UNAIDS website. Data from the local context may also be used.)

Flipchart

According to the 2003 World Health Report, HIV/AIDS is now the leading cause of death worldwide among adults aged 15-59 years. Since the beginning of the epidemic, it is estimated that 21 million people have died of AIDS. In 2003 alone, 3 million people died and 2.3 million of these deaths occurred in sub-Saharan Africa. Every day, 5,000 men and women and 1,000 children die of AIDS in sub-Saharan Africa. In some parts of Africa, current adult mortality rates are higher than they were three decades ago. In Botswana, Lesotho, Swaziland and Zimbabwe, HIV/AIDS has reduced life expectancy by more than 20 years. In South Africa, life expectancy is predicted to fall to 40 years in 2008. This is down from a pre-epidemic high of 65 years.

At the end of 2003, an estimated 40 million people were living with HIV worldwide. At present, 95 percent of people living with the virus are in the developing world and 26.6 million (two thirds of the total) are living in sub-Saharan Africa.

There were 5 million new infections worldwide during 2003: this is equivalent to 14,000 new infections every day. This means that 10 people are getting infected every minute. The new infections included an estimated 700, 000 children under 15 years - over 90% of them infected through mother-to-child transmission. 3.2 million of the new infections were in sub-Saharan Africa.

More than 50% of new infections are occurring in young people under the age of 25 years. According to UNAIDS, at the end of 2002 in sub-Saharan Africa, about twice as many young women as men were infected.

There are a number of reasons why women, and young women in particular, are more vulnerable to HIV infection than men. (*Ask participants to suggest reasons – use flipchart.*)

Reasons include:

Biological:

- ⊙ The vagina is a receptive organ and thus holds infected fluids.
- ⊙ The vagina has a larger exposed surface area than the penis.
- ⊙ The mucous membrane of the vagina is more easily damaged than the skin of the penis.
- ⊙ Women are exposed to a greater amount of infected fluids (semen) than men.
- ⊙ In young women, the cells of the cervix are particularly vulnerable to infection.
- ⊙ Scarring as a result of female genital cutting may increase the risk of injury during sex.

Socio-economic:

- ⊙ Women are often economically dependent on men and thus not in a position to negotiate safer sex.
- ⊙ Sex may be an economic survival mechanism.
- ⊙ For cultural and social reasons women may fear rejection if negotiating safer sex or refusing sex.
- ⊙ Refusal of sex may lead to violence against women.
- ⊙ Sexual violence against women is common.
- ⊙ Young women often have relationships with older men. Gender issues and the large differences in ages may create a power imbalance.



PowerPoint: 1.4a (iii) Regional prevalence 1986-2001 (This information should be updated according to the most recent data available.)

Ask participants to refer to the handout: "Table of country-specific HIV/AIDS estimates and data, end-2001." Ask different groups to find prevalences in a number of countries, including where they are working. If possible have a large world map and use pins and flags to show country prevalences. Then continue with PowerPoint presentation 1.4a (iii).

UNAIDS and WHO produce new country estimates of HIV prevalence every two years. The most recent estimates of the status of the epidemic in specific countries published by UNAIDS are as of end-2001 (and are detailed in the "Table of country-specific HIV/AIDS estimates and data, end-2001" in the Report on the Global HIV/AIDS Epidemic, 2002). The next set of country estimates will be published in the UNAIDS Report on the Global HIV/AIDS Epidemic, 2004, in July 2004.

HIV/AIDS has spread rapidly, particularly in southern Africa. At the end of 2001 there were seven countries in which adult HIV prevalence was higher than 20%, all in southern Africa: Botswana, Lesotho, Namibia, South Africa, Swaziland, Zambia, Zimbabwe.

While the highest HIV prevalences are in Africa, the fastest growing epidemic is in the European region, in particular in the countries of the former Soviet Union. This epidemic is fueled mainly by injecting drug use.

In Asia, prevalences are not high yet (mostly under 1 percent), but because of the high populations of countries like India and China, absolute numbers of people with HIV are high, e.g., India is home to around 4 million PLWA. Furthermore, the large populations may obscure serious sub-epidemics occurring in certain areas or among core groups, such as injecting drug users and commercial sex workers.

There are various reasons for the different prevalences in different countries. (Ask participants to suggest reasons.) For example, different standards of health care, cultural practices, poverty, conflict, political commitment, and probably other reasons which we do not yet understand. One important reason for the differences is that countries are at different stages of the epidemic. In the early stages, the epidemic is usually concentrated in certain groups of the population called core groups, which engage in a high level of risky sexual behavior, e.g., commercial sex workers and their clients; men who have sex with men; migrant workers, truck drivers, the military and sometimes adolescents. The epidemic later spreads from the core groups into the general population, e.g., from the clients of sex workers to their wives.

While it is important not to attach negative "labels" to high-risk groups, it is also important to recognize the role of core groups in the epidemic, and to aim specific interventions at these groups.

In countries where a low percentage of the population is at present HIV-positive, a few years could see a dramatic increase, if urgent action is not taken. For example, in Swaziland, HIV prevalence was 4% in 1992 and 33% in 2001.

1.5 How does HIV/AIDS affect the body? —◎



Activity

1.5a Identifying physical manifestations of HIV/AIDS



Work in small groups.

Discussion - 15 minutes. Feedback in plenary - 15 minutes.

Materials: Case study handouts.

Flipchart

Facilitator...

...introduces:

In this activity we look at what HIV/AIDS does to the body. Read the case studies and study the photos. Identify symptoms and signs of illness associated with HIV/AIDS. Also write down any other symptoms and signs associated with HIV/AIDS that you know about.

...takes feedback:

Writes down symptoms and signs on flipchart using diagram of a person.

From text and photos: weight loss, weakness, diarrhea, ulcer, TB, vomiting, blindness, confusion, sores, fungal skin infections.

...concludes:

HIV/AIDS results in a variety of symptoms and signs. We will go into more detail on the clinical manifestations in the next presentation.

Start HIV/AIDS tree: symptoms and signs = lower branches.

1.5b PRESENTATION: *Timeline of HIV/AIDS*



Presentation – 40 minutes total: 1.5b (i) and (ii).

Materials: PowerPoint: 1.5b (i) Timeline of HIV/AIDS

Poster: Timeline of HIV/AIDS (Example in PowerPoint: Teaching aids Day 1)

HIV/AIDS tree: lower branches

From the time of infection with HIV, a person goes through a number of phases until s/he reaches the final phase called AIDS.

CD4 count:

It is possible to measure the degree of damage to the immune system by measuring the number of CD4 cells in a person's blood. Recall CD4 cells are the body's immune system's "army commanders." The CD4 count will reflect the phase of the disease.

Normal CD4 count: 500-1200 cells/ml

Beginning of HIV-related illness: 200-500 cells/ml

AIDS: under 200 cells/ml

The risk of death increases significantly when the CD4 count drops to below 50. In most developing countries, CD4 counts are not readily available. Where CD4 counts can be done, they are used to make decisions on the type of treatment the person should be getting and when they should start taking antiretrovirals (ARVs), if these are available. It also seems to be helpful to people with HIV to know their CD4 count as it gives them a sense of where they stand with regard to their HIV/AIDS situation.

Phases of HIV/AIDS:

1. Infection with HIV

This is the moment the virus gets into the body - sometimes called "inoculation."

2. Window period

Time frame: up to 3 months after infection.

No symptoms or signs.

The virus is multiplying rapidly. There are very high levels of virus in the blood and other body fluids at this time (i.e., the viral load is high), so the person is very infectious. But the HIV test is negative because the person has not yet started to make the antibodies that the test measures.

3. Seroconversion

Time frame: marks the end of the window period; lasts a week or two.

At this point, the body starts to make antibodies against the HIV virus. Antibodies are proteins that are made by the immune system to use as weapons to fight the virus. It is these antibodies that are measured in most HIV tests. From the time of seroconversion onwards, the person will have a positive HIV test. At this time, the person may have a flu-like illness with fever, headache, sore throat, tiredness, swollen glands, joint pains and a rash. This brief period of illness often passes unnoticed. After recovery, the person is completely well again. 25% of people do not experience illness at seroconversion.

4. Asymptomatic period, i.e., period of no symptoms (latent period)

Time frame: variable; less than one year to 15 years or more.

Most people remain healthy for about 3 years, but the actual number of years will vary from person to person. About 5 to 10% of people start to experience health problems after 1 to 2 years. Another 5-10% have no symptoms for up to 15 years. This timeframe depends a lot on the socio-economic circumstances of the person. If they have enough money to buy good food, live in healthy conditions and have access to drugs, they can live longer. (In babies and young children who have HIV, illness will often happen much earlier because they have an immature immune system.) During the asymptomatic period, the person feels and looks healthy. However, even though there are no outward signs of illness, the virus continues to actively multiply and gradually weakens the immune system. During the asymptomatic period, the person is also able to transmit the virus to others.

5. HIV/AIDS-related illness

Time frame: months to years; 4 or 5 years on average.

Signs and symptoms of illness start to appear, mild at first, but gradually becoming more frequent, more severe and longer-lasting.

6. AIDS

Time frame: Usually less than two years, unless treatment is available. In developing countries, most people die within one year of reaching this phase. In places where ARVs are used, the person can live for many years.

This is the final phase of HIV infection. At this point the immune system has become very weak and the person is very vulnerable to infections and cancers. During this phase the virus levels in the blood are very high again and the person is very infectious to others. The HIV test may however be negative, as the immune system may be so weak that it is unable even to produce antibodies. The patient dies when an untreatable infection or cancer develops.

Summary:

Without treatment, people usually progress to AIDS about 7-8 years after being infected with HIV. (This is the case in most developing countries.) It is not possible to accurately predict the course of the illness in any one person. The duration of the different stages will vary from person to person. Some people progressively deteriorate, while others have periods of illness alternating with periods of good health. The factors that determine the course of the disease in different people are not yet fully understood, but nutrition, emotional stress and access to health care can all play an important role.

A person living with HIV can transmit the virus to others during all the stages. Most people living with the virus are not aware that they are infected and so can transmit the virus to other people without realizing it. It is important to realize that it is not possible to tell whether or not a person is infected with HIV just by looking at him/her. Someone who has HIV can appear completely healthy for many years. On the other hand, a person who loses a lot of weight and is coughing could have TB and not have HIV. HIV is like termites infesting a house. The house looks good on the outside, but the termites are eating away the inside of the wood where they can't be seen. In the end, the house starts to collapse.

NB: It is also important to know that even if a person has HIV, s/he can be re-infected with different strains of the HIV virus. If this happens, s/he goes through the process of having a very high viral load for the second time. This is an additional attack on the immune system, which weakens it further, so the person will probably progress to AIDS more quickly. People with HIV therefore need to protect themselves against re-infection by abstaining or using condoms.



Materials: PowerPoint 1.5b (ii) Symptoms and signs, diagnosis, opportunistic infections

Symptoms and signs of HIV/AIDS

We saw from the case studies that a wide range of symptoms and signs are associated with HIV infection. HIV mainly affects the respiratory system, the gastro-intestinal system, the skin and the central nervous system. Usually there is a combination of symptoms and signs that vary from person to person, and according to the stage of the disease. Some are due to a direct effect of the virus on certain body cells, such as those of the gastro-intestinal system and the brain. However, most clinical manifestations are caused by other infections and cancers that occur as a result of a weakened immune system.

WHO has developed a staging system that classifies HIV/AIDS disease into four stages, based on clinical signs and/or laboratory criteria. This staging system is used when making decisions about treatment options for PLWA. (*Ask participants to refer to handout: "WHO staging system." Illustrate with PowerPoint visuals. Compare WHO stages with Timeline of HIV/AIDS poster.*)

In developing countries, the main causes of death in people with HIV/AIDS are TB, chronic diarrhea, chest infections, cryptococcal meningitis and disseminated (widespread) Kaposi's sarcoma.

The diagnosis of AIDS

Diagnosing whether a person is infected with HIV is not difficult – it is quickly done using an HIV test. However, making the diagnosis of AIDS (i.e., WHO stage 4 of HIV infection) is more complex. A diagnosis of AIDS requires a positive HIV test, a CD count of below 200 and the presence of at least one of the stage 4 clinical criteria.

However, in many places there are no facilities to measure CD4 counts and many of the opportunistic infections require specialized laboratory tests for diagnosis. For places where laboratory tests are not available, WHO has established clinical guidelines for the diagnosis of AIDS.

WHO guidelines for the clinical diagnosis of AIDS in an adult:

To make the diagnosis of AIDS, at least two major and one minor sign should be present, in the absence of any other clear explanation for the signs:

Major signs:

- ⊗ Weight loss of more than 10% body weight
- ⊗ Diarrhea for more than 1 month
- ⊗ Fever for more than 1 month

Minor signs:

- ⊗ Persistent cough for more than one month
- ⊗ Generalized itching skin rash
- ⊗ Recurring shingles (herpes zoster)
- ⊗ Thrush of mouth and throat
- ⊗ Chronic severe and spreading cold sores (herpes simplex)
- ⊗ Generalized enlarged lymph nodes.
- ⊗ Loss of memory
- ⊗ Loss of intellectual capacity
- ⊗ Peripheral nerve damage

Why do people with HIV lose weight? *(Ask participants)*

There are a number of reasons for the severe weight loss associated with HIV infection:

- ⊗ Loss of appetite, nausea and digestive problems, which prevent people from eating and absorbing what they need from their food.
- ⊗ Diarrhea which causes dehydration and poor absorption of food.
- ⊗ High metabolic rate due to infection with HIV.
- ⊗ Increased energy requirements due to fever from illnesses such as malaria or TB.
- ⊗ Anemia due to inadequate iron intake or diseases such as malaria or hookworm, causing lack of energy, reducing appetite and ability to cook, work, buy food, etc.
- ⊗ Infections in the mouth or throat, making it difficult to chew and swallow food.
- ⊗ Socio-economic reasons: no money for food, too weak to work or prepare food, etc.

Opportunistic infections

Many of the clinical manifestations of HIV/AIDS are the result of opportunistic infections. We do not have time to discuss opportunistic infections in detail and the handout "HIV-related opportunistic diseases" gives a good overview. Opportunistic infections will be discussed further on Day 5. However, two types of opportunistic infections deserve special mention:

Sexually transmitted infections

STIs are a significant public health problem. The STI and HIV epidemics reinforce each other, i.e., STIs help HIV to spread and HIV helps STIs to spread. The spread of STIs is a threat to both HIV-positive and HIV-negative people. We will discuss STIs in depth on Day 3 of this course.

Tuberculosis

TB is also a serious public health problem. Nearly 2 million people die from TB every year. 95% of cases occur in developing countries.

About one-third of PLWA also become ill with TB. Most of these people are living in developing countries. In some countries in sub-Saharan Africa, up to 70% of patients with pulmonary tuberculosis are HIV-positive. TB accounts for up to a third of AIDS deaths worldwide and 40% in Africa.

TB and HIV also reinforce each other: A person with HIV is 10 times more likely to develop TB than a person who does not have HIV. The presence of TB may allow HIV to multiply more rapidly. TB and HIV are referred to as the "dual epidemic."

Most people who are infected with TB are not sick and are not infectious to others. The TB infection is kept under control by the immune system and is latent, or inactive, and may remain so for life. In people with HIV however, the immune system is weakened and unable to control the TB infection, so the person develops active TB and becomes ill.

Only people with active lung TB are infectious to others. When they cough, sneeze, spit or even talk, they spread TB germs into the air, which can infect other people. Untreated, a person with active lung TB will infect an average of 10-15 people per year. However, after two weeks of appropriate treatment, people with TB are generally no longer infectious. People with TB of other parts of the body (e.g., TB meningitis) cannot infect others.

TB is a serious public health threat to people with and without HIV. WHO has developed a treatment strategy for TB called Directly Observed Therapy Short course (DOTS). Treatment of TB through DOTS is ranked by the World Bank as one of the top ten most cost-effective public health interventions. People with HIV can also take a relatively inexpensive anti-TB drug, INH (isoniazide) to protect them against developing TB.

Services for HIV and TB should be linked. All HIV programs should include a component that addresses TB.

1.6 How do people get HIV?

1.6a PRESENTATION: *Transmission routes*



Presentation – 10 minutes.

Materials: PowerPoint:1.6a Transmission routes

Transmission routes poster (Example in PowerPoint: Teaching aids Day 1)

HIV/AIDS tree: roots

How HIV is transmitted

HIV is found in all body fluids of infected people. (*Ask participants to name some body fluids.*)

However, it is only when HIV is present in high enough concentrations in a body fluid that it can be transmitted to other people. Blood, semen, vaginal secretions and breast milk are the only body fluids through which HIV transmission has been documented. These are the only body fluids in which the concentrations of HIV are high enough to infect others.

HIV is not transmitted through tears, sweat, saliva, vomit, feces or urine. Although these substances can contain HIV, they do not contain the virus in amounts high enough to cause infection. To date, there is no documentation of HIV transmission through these substances.

HIV can only be passed on to another person if the fluids get into that person's body. The virus needs a specific entry route. This may be through damage to the skin, mucous membrane or placenta, in the form of cuts, sores or infection. HIV is a weak virus and this also affects transmission: HIV can only survive outside the body for a very short time and must be able to enter a new host immediately. For example, HIV cannot survive on toilet seats or in dried blood.

HIV can get inside a person's body through three channels only: *(poster)*

Sex: 70%
Blood: 20% (Blood transfusions/needles: 5-10%; Injecting drug users: 10%)
MTCT: 10%

1. Sexual route

a) Unprotected sexual intercourse: vaginal, anal or oral.

Tiny tears in the skin or the mucous membranes of the genitals, or the mouth or anus, which may occur during sex, allow the virus to enter. If there is an open sore in any of these areas, it is even easier for the virus to enter.

The receptive partner is at greater risk in vaginal, anal and oral sex. With penile-vaginal sex, the female partner is at greater risk because of the greater exposed surface area in the female genital tract than in the male genital tract, the higher concentrations of HIV in seminal fluids than in vaginal fluids, and the larger amount of semen than vaginal fluid exchanged during intercourse. With anal sex, the receptive partner is particularly at risk because of the fragile mucous membrane of the rectum.

b) Close sexual contact even without penetration carries a risk of infection if there is exposure to blood, open sores, semen or vaginal fluids, e.g., a woman has a sore on her external genitals: some semen gets onto this sore.

2. Blood route

a) Transfusions (receiving infected blood or blood products) or transplant of an infected organ

b) Injections (contaminated needles: health care setting or injecting drug users)

c) Cutting instruments (contaminated cutting or skin-piercing instruments, such as scalpels, needles, tattoo needles, circumcision instruments). (Ask participants for examples of instruments used in cultural practices)

d) Contact with broken skin (exposure to blood through cuts or sores, e.g., traditional birth attendant with sore on hand, not wearing gloves)

e) Needle stick injury

f) Mucous membrane splash

g) Sharing utensils such as razor blades and toothbrushes

3. Mother-to-child route

During pregnancy, delivery or breastfeeding. About one in every three babies born to HIV-positive mothers will also become infected with HIV.

We will discuss the blood route and mother-to-child route in further detail on Day 4.

HIV/AIDS tree: transmission routes = roots

How HIV is NOT transmitted

Many myths exist about how HIV is transmitted. (Ask participants for examples.) HIV is NOT transmitted through: coughing, sneezing, donating blood, shared clothing, touching, shared food or dishes, water, kissing, shaking hands, toilet seats, insect bites, telephones, living or working with a person with HIV.

(Refer to p.26 of "Protecting the Future" for an explanation of why mosquitoes cannot transmit HIV.)

1.6b **ACTIVITY:** *The concept of levels of risk*



Work in groups.

Discussion – 15 minutes. Feedback in plenary – 10 minutes.

Materials: Picture cards

Flipchart sheets

Transmission picture card game. Protecting the Future: page 10.

1.7 Why do people get HIV?



1.7a PRESENTATION: *Biological risk factors*



Presentation – 10 minutes.

Materials: PowerPoint 1.7a Biological risk factors
HIV/AIDS tree: fertilizers

It should by now be easy to answer the following questions:

What causes AIDS?

The HIV virus.

How does the HIV virus get into a person's body?

Three routes:

- ⊙ sex
- ⊙ blood
- ⊙ mother-to-child transmission (MTCT)

In the risk factor game, we saw that some situations carry a higher risk for transmitting HIV than others. We know that unprotected sex with an HIV-infected person carries a significant risk of getting HIV. But although this is already a high risk situation, there are some factors that make the risk even higher: we can call these biological risk factors. For the moment, we will focus on biological risk factors for the sex route. (The biological risk factors for the other two routes will be covered later on in the course.)

1. Viral load

Viral load refers to the amount of HIV virus in the blood. The higher the amount of viruses in the infected person's blood, the greater the chance that s/he will transmit the infection. This happens soon after infection during the window period, and again at the stage of AIDS. It also happens when there is reinfection. High viral loads increase the risk of transmission for all routes.

The following are biological risk factors associated with the sexual transmission route:

2. Receptive partner

In penile–vaginal sex, women are more susceptible to getting HIV than men because of the structure of the female genital tract: greater exposed area, more mucous membrane, vagina is a receptive organ. In penile–anal sex, the receptive partner is more susceptible because of the fragile nature of the rectal mucosa.

3. Age

Young women (adolescents) are particularly susceptible because the genital tract is immature and the skin is delicate. Men are also at increased risk for acquiring the infection from an infected young girl because of the risk of bleeding from tears in vaginal mucosa or skin.

4. Sex during menstruation

The woman is more vulnerable as a result of the change in the uterus lining, and the man is also more vulnerable because of the exposure to blood.

5. Uncircumcised male

Uncircumcised men are more easily infected. Research has shown biological explanations for a link between HIV infection and lack of circumcision. The inside of the foreskin can absorb HIV very efficiently, mainly because it contains HIV "target cells" in much greater quantities than other genital tissue. Also, the internal foreskin has a mucous membrane surface, which is particularly vulnerable to tears and abrasions, and, consequently, infection with STIs and HIV. (It is important to remember though that some circumcision practices may in fact result in HIV infection, e.g., using unclean instruments.)

6. Damage to the skin or mucous membranes

The risk of both giving and getting HIV increases when there is damage to the skin or mucous membrane of the genital area, such as abrasions or tears, as may occur during violent sex or with practices such as dry sex. Female genital cutting poses a particular risk for HIV transmission. Scar tissue formed after cutting may be easily damaged during sex, resulting in a wound that facilitates HIV infection and transmission.

7. STIs

Having an STI significantly increases the risk of both giving and getting HIV. (Discussed in detail on Day 3.)

HIV/AIDS tree: biological risk factors = fertilizers



Activity

1.7b *The concept of spread of the disease*



Plenary – 25 minutes.

Materials: Vinegar, water, phenol red, glasses or clear plastic cups, instruction cards

PowerPoint poster: in Teaching aids Day I:

"Everyone he's slept with is sleeping with you"

1. Facilitator shows PowerPoint poster: "Everyone he is sleeping with is sleeping with you." What is the message here? Facilitator concludes: When you have sex with someone, there is a chance that you will acquire an infection that any of his/her previous partners may have had and passed on to him/her.
2. HIV epidemic exercise. Protecting the future: p13. (Use 6 or 8 participants to carry out the exercise in front of the class.)

Note: The exercise in "Protecting the Future" uses laundry starch and 10% iodine solution as reagents. A more dramatic effect can however be achieved by using white vinegar instead of starch solution and phenol red instead of iodine. (Phenol red is used for testing pH – it can be obtained in kits used to test the pH of swimming pools or may be available in some pharmacies.) Any weak colorless acid can also be used instead of vinegar.



Activity

1.7c *Video: the concept of spread of the disease*



Video show – 15 minutes; discussion in plenary – 5 minutes.

Materials: video: Guilty (Note: This video may not be appropriate or relevant to all contexts.)

The facilitator should assess the suitability before showing the video.)

Facilitator...

...introduces video:

This video tries to trace the source of an HIV infection. The story unfolds in a township in Cape Town, South Africa. Think about what message the video is trying to convey. Explain to the participants that such an attempt at "contact tracing" is not acceptable. However, the video is attempting to highlight some realities about the way the epidemic can spread and how people may blame each other.

After the video, the facilitator asks about what the message was, and for any other impressions.

...concludes:

The video is shocking in that it is violent and uses explicit and sometimes coarse language. This, however, reflects the context of the story: a poverty-stricken township with many social problems. Transmission of the virus through shared needles as well as sex is shown. The video illustrates vividly how HIV can spread through a number of different segments of a society and that it is impossible to ascribe "guilt" for where it began. The video also looks at a number of social issues underlying the HIV epidemic.



Activity

1.7d Demonstrating the multiple factors underlying the HIV/AIDS epidemic



Work in three groups.

Preparation – 25 minutes. Feedback in plenary – 25 minutes.

Materials: Case studies written on flipchart sheets; flipcharts

Example in PowerPoint: Teaching aids Day 1: "But why?" flowchart

PowerPoint 1.7d Disasters maps

HIV/AIDS tree: soil

Facilitator...

...introduces:

So far we have looked at symptoms and signs (branches of the AIDS tree), transmission routes (roots) and biological risk factors (fertilizers). Now we are going to look at the soil in which the tree grows: the underlying reasons why people get HIV/AIDS. We can call these the socio-economic "**vulnerability factors.**"

"But why?" exercise.

Facilitator demonstrates the idea of a "But why?" flowchart. (Refer to example in PowerPoint: Teaching aids Day 1.) Each group then reads and responds to one of the following case studies. Participants draw a "But why?" flow chart on a flipchart sheet and prepare to present it in the plenary session. (Note: Facilitators should adapt case studies or create their own case studies to reflect the local context. For instance, facilitators could modify or add examples specific to a refugee or internally displaced setting. Also note, there are no "right" or "wrong" answers. The "But why?" exercise is used to draw out factors relevant to the context in which participants are living or working.)

Case study A

As a child, Marie was subjected to genital cutting in a traditional ceremony. When she was 15 years old, Marie and her three younger siblings were forced to flee to a neighboring country when fighting broke out near their village. Their father was killed and they became separated from their mother while they were fleeing. Marie and her siblings now live in a refugee camp. Marie had never had any sexual partners before coming to live in the camp. Within a few months she is infected with HIV. Why did Marie get HIV?

Case study B

Michael is 17 years old. He has had several girlfriends. He and his friends like to visit bars and often sit and talk about their sexual experiences. None of them uses condoms. One day Michael develops a small sore on his penis. He continues to have sex with the girlfriend of the moment. A week later Michael is infected with HIV. Why did Michael get HIV?

Case study C

Fatima lives in a rural area. She has no education. She married her husband Abdul when she was 16. She has had no other sexual partners. They have one child. Fatima would like another child but has been unable to become pregnant again. Abdul works as a truck driver for an NGO and is away from home a lot. Fatima knows he sleeps with other women. At age 25, Fatima starts to get frequent chest infections and loses weight. She is HIV positive. Why did Fatima get HIV?

...takes feedback:

Each group presents their flow chart. Other groups comment.



Activity 1.7d cont'd

On the flow charts, some reasons or "vulnerability factors" come up repeatedly. Ask participants to identify a few of the factors that were repeatedly involved. Then ask them to spend 5 minutes identifying the main vulnerability factors in the contexts where they are working. Ask them to specifically think about the role of conflict and displacement in increasing vulnerability. Then take feedback in plenary.

...notes:

Vulnerability factors which may come up repeatedly: youth, gender issues, cultural taboos on discussing sex, cultural pressures on men and women, resources, education, availability of services/commodities, knowledge, beliefs (and other factors that participants may identify).

Factors specifically relating to conflict may include:

- ⊙ Social disruption may result in breakdown of traditional norms and loss of protective networks around women and young people.
- ⊙ Conflict is often associated with population movements, resulting in mixing of populations with different HIV prevalences.
- ⊙ There may be high levels of sexual violence and exploitation, (e.g., by community members, military or even NGO workers).
- ⊙ Women may be forced to resort to sex for survival.
- ⊙ The presence of military, both enemy and friendly, poses a risk, both through sexual violence, social interactions with the population and commercial sex work. Military have been shown to have HIV prevalences significantly higher than their civilian counterparts.
- ⊙ Commercial sex work often flourishes in conflict-affected populations, where men may be separated from families, and some groups such as peace keeping forces and relief workers have a high income relative to the population.
- ⊙ There may be a breakdown of health services, with limited supplies and unsafe practices such as unscreened blood transfusions.
- ⊙ Humanitarian workers may also be vulnerable, due to stress, isolation, high levels of alcohol use and little support or opportunities for recreation.

Show PowerPoint maps: ask participants for their impressions.

...concludes:

The reason we did the "But why?" exercise is to show the complexity of the factors that can influence the spread of HIV, and to identify factors that seem to be playing an important role in fueling the epidemic.

A number of factors were identified that increase vulnerability to HIV. The conditions surrounding conflict and displacement may exacerbate existing vulnerabilities and/or increase vulnerability in their own right.

The factors that influence the spread of HIV in conflict-affected situations are complex and not yet fully understood. In some countries, e.g., Bosnia and Sierra Leone, HIV prevalence remained low despite long-standing conflict. It may be that factors such as closure of transportation routes, which limit access to conflict-affected areas, may slow the progression of the disease. However, it may also be that conflict has a delaying effect and that there may be rapid growth of the epidemic in the post-conflict phase, for example, when transport routes reopen, military return home, and when there is a lack of awareness among the population about HIV risk.

Although all these factors are not yet well understood, the potential vulnerability factors associated with conflict cannot be denied and all conflict-affected populations should be considered vulnerable. Sometimes HIV may not seem a priority issue in emergencies, compared with health problems that are obvious and immediately life threatening, e.g., cholera or measles outbreaks. However, the consequences of failing to address HIV are likely to result in significant human suffering in the future.

AIDS tree: vulnerability factors = soil

1.7e PRESENTATION: *Organizing the vulnerability factors*



Presentation – 10 minutes.

Materials: Vulnerability areas posters (Example in PowerPoint: Teaching aids Day I)

Because there are many factors influencing the spread of the HIV/AIDS epidemic, it can sometimes seem as if these are circumstances beyond our control. This can make us feel helpless and hopeless. It can also be easy to throw the responsibility for addressing the problem onto other people or the government. But we should never forget the issue of personal responsibility. Even though circumstances may seem overwhelming, each person needs to say "What can I do?" This could be in our personal lives, or in our work, or in our social interactions. We may not be able to solve every problem immediately, but we have to start somewhere and we need to start by looking at what can realistically be done within our own contexts.

If we want to address a problem, we need to understand where it is coming from. This is the reason we did the "But why?" exercise. We saw that there are many vulnerability factors contributing to the problem of HIV. Trying to find a way to address all these individual factors would be complicated. To make it easier to think about all of the factors, it is helpful to categorize them. There could be many different ways of categorizing the vulnerability factors. In this course, we are going to use the following method which groups vulnerability factors into three "socio-economic vulnerability areas":

Socio-economic vulnerability areas:

1. Unsafe behavior

Unsafe behavior is influenced by a range of factors including knowledge, attitudes and beliefs, as well as personal circumstances and environment.

2. Power issues

We can think of power here in terms of the ability to take control of your situation. It involves two issues: power imbalances within relationships, and lack of power to do something about your circumstances because of lack of resources. Power is influenced by culture, gender, poverty, education, government, etc.

3. Health services issues

This includes clinical services, counseling services, laboratory services, condoms, drugs, etc.

Availability of services is influenced by the economic and political situation, infrastructure, rural versus urban areas, etc.

One way of approaching the HIV/AIDS problem would be to see what could be done in each of these vulnerability areas. It is also important to realize that addressing only one vulnerability area will not solve the problem: the three areas influence each other and therefore all three must be addressed. (*Ask participants for examples of how the areas influence each other. For example, condoms may be available, but people may lack awareness of the need to use them, or may not be able to afford them, or women may lack the power to negotiate condom use with their partners.*)

The "But why?" exercise also highlights the fact that an individual does not exist in isolation. The way in which an individual lives is influenced by personal factors, by the community in which they live and by the broader society in which the community exists. We can therefore say that a person is subject to three different levels of influence:

Levels of influence:

1. Individual (personal) level:

Includes:

Knowledge, attitude, beliefs, age, gender, health status, education level, economic status.

2. Community ("near") level:

Includes:

Social influences of family, friends, peers; social norms ("how things should be done"); cultural/religious beliefs, traditions, taboos; "fashion."

Living and working conditions: physical environment, availability of services, access to education, access to information.

3. Societal ("overarching") level:

Includes:

Culture, religion, social action, economy, infrastructure, government policy, political stability, dependence on foreign aid.

All three levels also affect each other. Therefore, if we are going to address HIV, we must consider all three levels. The socio-economic vulnerability factors we identified are present in all three levels. (Ask participants for examples of how the different levels of influence affect each other. For example, a young man may want to use condoms, but may be influenced by his peers to have unprotected sex, or the religion to which he belongs may disapprove of condom use.)

In summary, therefore, we need to look at three vulnerability areas and three influence levels. In other words, we need a **multidimensional approach**.

| | | SOCIO-ECONOMIC VULNERABILITY AREAS | | |
|------------------------------|---------------------|------------------------------------|---|---------------------------|
| | | Unsafe behavior | Power issues Relationships/Resources | Health services issues |
| LEVELS OF INFLUENCE ↑↓ | Individual Level | | | |
| | Community Level | | | |
| | Societal Level | | | |

We will apply these concepts on Day 2 when we start looking at HIV programs.

1.8 Conclusion



- ◎ Overview of the day, with link to Day 2 ("Where have we come from and where are we going?")
- ◎ Suggested reading
- ◎ Post-test
- ◎ Daily evaluation