

CHAPTER FOUR

4.0 HIV/Associated Virus And Human Immune System

HIV stands for "Human Immune deficiency Virus", "Human" because the virus causes disease only in people. "Immune deficiency" because the immune system which normally protects a person from disease becomes weak. "Virus" because like all viruses, HIV is small organism that infects living things and use them to make copies of itself. HIV causes AIDS (Acquired Immune Deficiency Syndrome). AIDS is a group of disease that occurs when HIV damages a person's immune system. Most people with HIV feel healthy for the first few years after getting the virus but later they become sick with AIDS.³⁸

Viruses are tiny organisms even smaller than the bacteria that cause tuberculosis or cholera. They are common, so common that we all become infected with them many times throughout our lives. Viruses cause common cold, polio, measles, mumps and flu. These viruses can be spread through coughing, sneezing and touching. HIV is different even though it is a virus, it cannot spread through any of the ways mentioned above. HIV can be spread only through sexual activities, blood transmission, dirty needles, and unsterilized instruments and from mother to her unborn baby or a baby under breast-feeding³⁹.

Virus is difficult to treat with medicine. They are not affected by the medicines that work against bacteria; even powerful antibiotics like penicillin or tetracycline do not work against the. HIV is a special kind of virus called a retrovirus. It makes copies of itself in a different way than many other viruses. Because of this, it is more difficult to treat the best

³⁸ Rueben Granich et.al, HIV Health and Community. A Guide for Action, Publisher, The Hesperian Foundation, Berkeley, California, USA, 2001. p.5.

way to stop the spread of this viruses and the disease they cause is to prevent people from getting infected in the first place. One can stop the spread of viruses like measles by using a vaccine. But changing behaviour can also stop the spread of disease. For example, washing your hands after going to the bathroom will lower your chances of spreading diarrhea to other people.

There are two types of human immune deficiency virus, HIV-1 and HIV-2. Like symbiotic, they have similarities and differences. HIV-1 is found in all parts of the world. HIV-2 is found mostly in West Africa. Since the spread of both viruses can be prevented in the same ways, urgent measure is required in this direction⁴⁰.

A special protein called CD4 marks the outsides of some immune system cells, making them different from other immune cells. The CD4 is like stripes that mark a Zebra different from Horse. CD4 cells are also called helper cells because the body sends them to identify and defend against invaders like virus and bacteria. However, HIV enters cell that have CD4 on their surface. In other words, the same virus (HIV) that they are trying to defend against, attacks the CD4 cell. This is a serious problem because the body needs CD4 cell to defend itself against diseases. This is why people with HIV often become sick from organisms that people without HIV can usually fight off. Bacteria, fungi, other viruses and parasites take the "opportunity" to infect a person with a weak immune system. The illnesses they cause are called "opportunistic infections" and they can kill a person with HIV⁴¹.

When HIV gets inside the body, it looks for CD4 cells, when it finds a CD4 cell, it attaches itself to the cell and enters it. Once inside CD 4 cell, HIV finds the DNA in the cell

³⁹ Ibid. p.6.

⁴⁰ Rueben Granich et.al, HIV Health and Community. A Guide for Action, Publisher, The Hesperian Foundation, Berkeley, California, USA, 2001. p.7

⁴¹ D.H. Watts edited The Medical Management of AIDS in Reuben Ganich et. al ibid p.5

nucleus. HIV makes a copy of itself from the DNA building materials in the cell. This copy then hides itself in the CD4 cell's DNA. Under a microscope, the cell's DNA appears normal, even though it is now mixed with HIV. Once safely hidden in the cell's DNA, HIV can do one or two things. It can stay quietly in the cell or it can turn on the cell's DNA and use the cell's machinery to make copies of itself, and to make copies, it uses a protein called Reverse Transcriptase. If it begins reproducing, it can make thousands of new HIV. These new viruses leave the cell and enter other CD4 cells and the same thing happens again⁴².

When the HIV's DNA lies inside the cell's DNA, there is no way for the body to get rid of it. In fact, HIV hides so well that the body does not even know it is there. This ability to hide lets HIV to spread within the body. In addition to making copies of itself within the affected cells, HIV has another way of reproducing. When the cell decides it is time to make another cell, it reproduces HIV DNA as well as its own. Each time a new cell is made, HIV is also made because there is no way to tell the difference between DNA from HIV and DNA from body cells. Besides, there are no medicines that can completely reverse the virus from the body.⁴³

According to Reuben et. al, there are two types of drugs that actually work to stop HIV. The first is a reverse transcriptase inhibitor. Examples of this type of medicines are Zidovudine (AZT) and Nevirapine which work by stopping HIV from becoming parts of the cell's DNA. The other type of medicine is a protease inhibitor such as Saquinavir, etc. It stops the virus from putting itself together and reproducing. By slowing the ability of the virus to make copies of itself, these drugs are often able to keep people alive for many years. However, they cannot get rid of HIV and cure a person's body since it has not removed the

⁴² *ibid* p.9

⁴³ *ibid* p.10

virus. This means that medicines have to be taken for life. This leads to another problem. If a person does take medicines against HIV regularly, the medicine eventually stops working because the virus gets used to them. Furthermore, even though it fights HIV, these drugs sometimes harm the person who takes them. The drugs for HIV are expensive and HIV patients need to take more than one of these drugs at a time, which can cost \$350 or more. Unfortunately, only few people with HIV can afford these drugs because these medicines are not available for most of the people in the world who have HIV. They resort to searching for other medicines and medicinal plants that will work against HIV.⁴⁴

HIV infection and HIV disease damages many parts of the body. It can do this in two ways; one is by directly invading different organs; the other is by weakening the immune system and allowing other organisms to cause disease. HIV directly infects the cells in a person's brain, nervous system, intestines and blood system. The effect on cells (brain) affects the way the person thinks. It also causes pain or numbness in arms and legs, damages the nerves, causes diarrhea, damage the intestines and causes anemia and bleeding and also damages the blood. Although HIV can cause people to be ill, we already know that not everyone with HIV is sick. This is because there are different stages to HIV infection, beginning with the time when a person is first infected moving through a period when no symptoms are present, to reaching a time when symptoms first appear and ending with advanced HIV disease, AIDS⁴⁵.

The first stage of HIV infection occurs after a person is infected with the virus. Usually people do not notice when they get HIV; they do not find out that they have the virus until later, when they are tested or become ill. A few people, however, do notice symptoms

⁴⁴ *ibid* p.7

⁴⁵ *ibid* p.8

1-4 weeks after they are infected with the virus. The symptoms is much like the symptoms of the flu; sore throats, fever, headache, stomach pain, diarrhea and feeling of being tired. After a week, a rash may appear on the chest, face and neck, night sweats may occur, muscle and joint pains, swelling in the lymph nodes, nausea and vomiting. These symptoms usually last less than two weeks.

Unfortunately, HIV tests do not work well in the first few weeks after infection, because the test looks for antibodies and the body of someone who has just become infected with HIV has not made antibodies. Yet most people will have antibodies within four weeks of getting HIV.⁴⁶ People recover from the first symptoms of HIV infection within a few days or weeks. For several years after that they feel well, look healthy and carry on with their daily lives. Their immune systems are able to fight the virus. This is called the "incubation period" or the quiet stage of HIV it is the time between the first infection with HIV and the point where a person becomes ill from the virus. For adults, this stage averages ten years. Right now, most of the people in the world who have HIV are in this incubation period. They are not experiencing any symptoms and many of them do not even know they have the virus and that they could spread it.⁴⁷

HIV acts on weight loss as a result of malnutrition. In communities where food is scarce, malnutrition becomes a serious problem. Not only do people need enough food, they need different kinds of food. For example, a person who is eating cassava and nothing else will become very ill. If a person is sick from not getting enough of the right kinds of food, he has malnutrition. Malnutrition can cause diseases as well as weight loss. One of the most important ways of staying healthy is to eat well. This is especially true for people with HIV

⁴⁶ *ibid* p. 14-15

⁴⁷ *ibid* p.16

and AIDS. They are likely to become malnourished from constantly being sick from diarrhea that prevents their bodies from absorbing the nutrients in food, from loss of appetite and from mouth infections that make eating difficult. Weight loss is so common in people with HIV that in some areas of Africa, AIDS is called "slim" disease. Eating a balanced diet of different foods helps people with HIV to stay strong and be healthy. A balanced diet is one in which different foods from the entire basic nutrient groups are eaten each day. These basic nutrients are protein, carbohydrates, fats and oils, vitamins and minerals.⁴⁸

4.1 Social Etiology of Disease

For all but a tiny span of time in human history, infectious diseases have been the major disease and causes of death and they are still widespread in developing countries. Sociologists have not studied these diseases very much. One reason is that the etiology of these diseases is dominated by a single factor (germ), whereas the etiology of the leading diseases in developed countries (e.g. heart disease and cancer) are more complex and involves a range of behavioral and social factors. These factors, however, may also be important in infectious diseases, especially HIV/AIDS. Therefore, to comprehend the social etiology of this disease, we must understand some sociological principles regarding the etiology of infectious disease in general. The sociological approach to the etiology of disease is an extension of epidemiological study which studies the differences between populations in the prevalence of diseases between sectors (sub-populations) of one population.⁴⁹ The basic concepts of this approach are agent, host and environment.

⁴⁸ *ibid*

⁴⁹ William A. Rushing. The AIDS Epidemic: Social Dimensions of an Infectious Disease, Publisher Westview Press, San Francisco, USA. p.9

The immediate cause of an infectious disease is an invisible parasite or microbe called the agent (virus, bacteria). The agent attacks the host (e.g. people) and feed on or in the tissues, organs, skins and secretions of the host. In the absence of a medical cure, the host usually gets sick and sometimes dies. However, since the immune system of the host normally fights back, the host may survive and develop immunity to future attacks.

Germ theory led to the discovery that micro-organisms cause infectious diseases. It also gave rise in medicine to the doctrine of specific etiology, which holds that for each disease there is one cause.⁵⁰ However, infectious diseases are more complicated than the doctrine suggests. The character and the environment of the population are also important factors. Some populations (sub-population) has stronger immune system than other populations. For example, the effect of inadequate nutrition on the immune system is susceptibility to infectious disease. In general, malnourished populations are most susceptible to many infectious diseases. Also, populations with a low prevalence of diseases have more resistance to new agents than do populations in which diseases are wide spread because their immunity in the latter may already being compromised by so many diseases. Features of the environment may also be important. For example, person-to-person transmission of an agent is more likely to occur in an environment in which individuals live in crowded conditions. The presence of an agent is thus not sufficient to cause a disease to be widespread in a population or sub-population. How prevalent it will be depends on characteristics of the population and environment.

⁵⁰ ibid p. 10

Major social factors in facilitating infectious disease are two demographic variables—population size/density and migration, are the most general social factors in the etiology of most infectious diseases.

Some infectious diseases exist only when populations reach certain size and density. The larger the population is, the greater are the chances of host-host transmission of infectious agents. Consequently, many infectious diseases were probably very rare or non-existent when hunting and gathering societies were universal. As population grew, especially with the development of cities, infectious diseases increased. Beginning with urbanization, societies were repeatedly wracked with devastating epidemics. As people move from place to place, they may also carry infectious agents and introduce them to the new populations. In this way, the centuries-long rural-to-urban migration led to the spread of infectious diseases; as did the development of inter-continental travel, which continues to be a factor in the spread of many infectious diseases.⁵¹

Social norms and customs may be important in the spread of diseases. The habits of poor personal hygiene and the custom of living near domesticated animals are obvious examples. The social dynamics behind poor health habits may be less obvious. For instance, a study in rural India showed that major sources of disease stemmed from the fecal contamination of food and water, due to the custom of defecating in the open field. To rectify the problem, public health officials installed public latrines, which people, especially women, promptly ignore. Using the open field to defecate was an important social activity every morning, and afternoon women go to the field, not only to relieve themselves, but also to take time off from busy domestic routines to gossip and exchange advice about husbands and

⁵¹ *ibid* p.11

mothers-in-law. The linked habits of going to the field for social gathering and for toilet-meet strongly fit the needs for community living and social cohesion. Since 1970s, a wide range of studies have found that individuals with extensive and cohesive networks of social relations have lower mortality rates from a variety of diseases than do individuals who have smaller and less cohesive networks. Since wider and more cohesive networks of social relations bring people together, social cohesion probably increases opportunities for host-to-host transmission of infectious agent.⁵²

In addition, rural immigrants brought their rural customs to the city. They brought domesticated animals and made no effort to collect and dispose their garbage and excreta (human and animal) frequently, leading to pile up in the street. Much of the garbage was eaten by domesticated animals, just as in the countryside, sewers were non-existent or inadequate and water was often contaminated. These conditions facilitated the spread of old microbes and could have led to the emergence of new ones.⁵³

Sociological phenomenon, not just the agent, determines how widespread the infection becomes. Given the presence of the agent, the prevalence of a disease will vary depending on social norms and other characteristics of the population. For example, the greater the cohesion is, the more widespread a contagious disease is apt to be. Therefore, even though a microbe may be a necessary and sufficient condition for an individual to get infected and a necessary condition for an epidemic to occur, it is not sufficient to cause an epidemic, social cofactors must also be present.⁵⁴

⁵² *ibid* p. 12

⁵³ *ibid* p. 17

⁵⁴ *ibit* p.18

The issue here is fundamentally different from the argument that HIV is not a sufficient (or necessary) condition for AIDS, in which different conceptions of the physiological causes of AIDS are the central issues. The argument concerns the social factors that contribute to its epidemic form the physiological action of HIV is the same for all individuals who are infected (though the speed of action may vary between individuals). But before HIV could have led to the AIDS epidemic, social cofactors had to have been in place. Guenther Risse stated, "Epidemics are the result of a complex interplay of biological and social factors which at certain points in our history create favorable ecological niches for given diseases to thrive and therefore decimate human kind."⁵⁵

The behavioral basis for the transmission of HIV, include anal sex a favored sexual practice for many gays, but anal tract is apt to tear during sexual intercourse and semen (which has a high concentration of blood cells) from the inserter, seeps into receiver's blood stream. Anal sex, especially, attracts high risk for the receiver to contract HIV. Other common sexual practices among male homosexuals, such as fisting (inserting the hand and arm up the anus may also result in tears of the anal tract), further increases the risk of infection from anal intercourse. The urethra wall of the inserter may also tear allowing blood from the receiver to enter the inserter's blood stream, although the risk to the inserter is far less than to the receiver. Because anal intercourse is also high risk for all sexually transmitted diseases (in the rectal and genital regions), the incidence of sexually transmitted diseases (STDs) besides HIV/AIDS in the gay population is unusually high. STDs also create lesions in the genital and anal regions. Since the lesions give HIV a convenient portal entry into a person's blood stream, STDs are themselves serious risk factors in the transmission of HIV.⁵⁶

⁵⁵ *ibid* pg. 19

⁵⁶ *ibid* p.20

Virtually, all experts now agree that in comparison to anal intercourse, penile-vaginal intercourse is a very inefficient (even rare) mode of transmitting HIV. The walls of vagina are thicker and tougher than those of the anal and urethra tracts, and hence are less apt to tear during sexual intercourse. Nevertheless, the presence of STDs does increase the chances of contracting HIV from an infected partner in penile-vaginal intercourse. The vaginal secretions, e.g. menstrual blood of an infected partner may infect the males, but the female is probably at greater risk than the male, since infected semen may remain in her genital tract for a period of time, which gives the agent an opportunity to penetrate tissue and enter the blood stream.⁵⁷

Although HIV is apparently a necessary and sufficient condition for the AIDS, social forces were also necessary for the AIDS epidemic to break out. Without the increase in gay sex and drug use in the 1960-1970 period, the evolution of needle sharing and shooting galleries, certain socio-sexual norms and institutions, HIV/AIDS epidemic would not have appeared as it is today. It is clear that social factors played a significant part in the etiology of AIDS epidemic. Other sectors of the population (lower social classes in every society) occupy high risk behavior in terms of drug use and other associated behaviors like unprotected sexual relationship etc.

4.2 Why Is HIV Spreading?

An opportunistic virus, Michael Merson observed "HIV feeds on our weaknesses." It thrives on our cultural reluctance to discuss sexuality. It exploits our ancient societal weaknesses

⁵⁷ *ibid* p.14

and plays on our spiritual weaknesses especially fear and intolerance⁵⁸. The worldwide fight against AIDS has seen an unprecedented mobilization of forces and many achievements. National AIDS programs have been set up with the help of World Health Organization in practically every developing country. There has been intense activity at grass root level as hundreds of specialists from AIDS service organizations have come up into being as well as non-governmental organizations and Community Unions have taken up the challenge to fight AIDS.

However, the campaign is up against formidable obstacles. AIDS follows the ancient fault lines in society, taking advantage of some humanity's most intractable problems such as poverty and discrimination. HIV is an "opportunistic" virus in the sense it exploits the ignorant and the prejudice, it instills fear and brings fatalism to the very human who have the tendency to hide from the difficult or threatening truths in the hope that they will go away on their own accord. AIDS won't affect us. A lesson from earlier epidemics is the danger of complacency, even denial that a catastrophe is in the making. Michael again told delegates in the Latin American AIDS Conference in 1991, "Complacency about HIV infection is specially dangerous because the infection is invisible for so long, by the time people die off in great numbers, the virus would have spread deep into the community."⁵⁹

Some countries maintain that their cultural and moral traditions ensure that they will never get a disease associated with deviance. A major stumbling block is the association of AIDS with homosexuality a behavior so taboo in many cultures that they rather not acknowledge it. People would prefer to believe it does not exist among them or only on the fringes of society where people may have been influenced by contact with "decadent". This

⁵⁸ Merson M.H., address at the closing ceremony of the viii international AIDS/IIISTD, World

⁵⁹ Merson M.H. address at the closing ceremony of the Viil International AIDS/IIISTD, World

line of argument is extended to other forms of behavior considered as deviant foreign cultures. The rationale for inaction is the belief that any outbreak of HIV infection will remain within the marginalized groups and never pose a threat to the wider population. Experience shows, however that this does not happen. Nowhere has the virus remained confined to any specific population or group. Denial has been part of the response to AIDS in virtually every country. For example, a government official in India said in 1991, "Considering our social and cultural values and traditions, I feel quite confident that AIDS will not spread as far and fast as in Africa". In 1990, an official of the Soviet Union said, "The roots of HIV spread are the American and Western way of life, unrestrained and flourishing homosexuality, drugs and sex obsession.

Risk behavior is universal. Sexual behavior that is risky is in the context of AIDS-unprotected intercourse with multiple partners is universal, sex between males occurs in every society and has been observed among other primates too. AIDS prevention programs run into serious obstacles: secrecy. In many countries, getting married and having children are not so much matter of choice as social survival and there is little scope to deviate from these norms, explains Meug Horton, of high-risk behavior unit. It follows that in such places, many men who are homosexual by preference will be family men whose relationship with other men has to be kept secret⁶⁰

Survey in Africa where homosexuality is strictly a taboo and widely denied, it is found that 15% of male respondents in Botswana acknowledge having had homosexual encounters, 18.6% of 586 people interviewed in Eastern Uganda said they know about bisexuality and 16% reported having had sex with both men and women, and in Egypt, 10%

⁶⁰ Congress Amsterdam, July 24, 1992 AIDS images of epidemic, World Health Organization *ibid.* p.43

of men interviewed at a clinic for sexually diseases claimed to be bisexual. Men do have sex with each other but it is not called homosexual, it doesn't have a name, it's just something that is done, noted a gay man from Sierra Leone. Social scientist investigating the world of female sex workers in Ethiopia were taken by surprise when the focus groups ventured in unsolicited information about young female, many of the students needing money to finance their studies are selling sex in ever-increasing numbers on the streets of Addis Ababa. And in countries of Central and Eastern Europe where homosexuals, for decades had to hide their sexual identity because of social and political repressions, the past few years have seen the first strivings of "gay liberation" as people have begun to come out of their closets and to organize on their own half.⁶¹

As far as heterosexual risk behavior is concerned, the record of family planning clinics, STD clinics, Maternity and Hospitals, bear witnesses to the fact that sexual activity outside marriage goes on in even the most conservative societies. The risk of HIV/AIDS infections becomes high and enormous. Indeed, some bizarre stratagems are used to make the act of sex with casual partners fit the prevailing ethos. In a few places in the Islamic world, for example, the custom of taking "temporary wives" has been adopted which allows a man to 'marry' for sex and divorce immediately afterwards. This sexual intercourse takes place within a context that sanctioned by law, religion and culture⁶². Another form of denial is to acknowledge the behavior and not the risk it carries for example in societies where heterosexual intercourse outside marriage is recognized as common as in USA and Europe. Some people continue to assert that this is not how HIV spreads in their countries and

⁶¹ *ibid.*p.44

²⁵ *ibid.*p. 45

⁶¹ *Ibid*

⁶² *ibid.*p.45

accused experts who say otherwise of deliberately deceiving the public⁶³. The fact that heterosexual spread in these countries has not been explosive as some predicted, if taken irrationally as justification for this position rather than as an indication of the great difficulty in forecasting the path of such a virus.

Unless countries acknowledge the full diversity of behavior practiced within their borders and its implications for the spread of HIV, the containment of AIDS is impossible. Effective education and behavioral change depend on frank and open discussion about HIV transmission and the measures people can take to protect themselves.

The power of ignorance, although many millions of dollars have been spent worldwide on information and education, the message is hard to get through. Many people continue to deny that AIDS has any relevance to their own lives. Myths and misconceptions abound. As late as 1990, in USA, the Americans wonder whether they could catch AIDS through handshakes, toilet seats, or popcorn served by someone with HIV. In parts of Africa, AIDS is associated with waste, believing that intercourse with a plump woman is "safe". Others are convinced that an HIV infected man can rid himself of the virus through sex with a virgin.

To an extent, these fantasies are the result of proliferation of complex and often contradictory information, for example, pictures of police wearing protective clothing when dealing with people they might think have HIV contradict the message that casual contact is not a threat. Sometimes messages are rejected because they conflict with cultural

⁶³ *ibid.*p.46

assumptions. A patient in an African AIDS hospital said "they say it's a virus that has made me sick, but I know it's witchcraft".

The fact that many people have never seen any one with AIDS, denies them a basis for believing that AIDS exists. People with AIDS who are prepared to reveal their status, therefore, play a vital role in awakening their communities to the reality of the epidemic. Donald De Gagne, a Director of the Vancouver People With AIDS (PWAs) noted , "So much can be done when people with AIDS are being used as educators". Young kids will listen attentively to a person with AIDS and be marked by experience that is much more effective than a public health person talking about AIDS in the abstract⁶⁴. It is still hard to get people to come out and be visible when they will face human right abuses, ignorance or rejection of the facts is a powerful barrier to the containment of AIDS. If people believe wrongly that they can be infected with HIV through casual contact or mosquitoes; they may see little point in modifying their sexual or drug injecting behavior. Ignorance also gives free rein to fear, prejudice, and the impulse to discrimination. These reactions are so widespread that a human rights organization comments, "People with HIV/AIDS met double jeopardy", they face death, while they are fighting for their lives, they often face discrimination. This is manifested in all areas of life; from health care to housing, education to work and travel. Whereas most illnesses produce sympathy and support from friends and neighbors, persons with HIV/AIDS are frequently feared and shunned⁶⁵

In an atmosphere of public prejudice and hysteria, many governments' first priority is to identify and isolate those with the virus. A number of countries insist on foreign workers, students or potential immigrants being tested for HIV, entry is denied to those that tested

⁶⁴ *ibid.* p.47

⁶⁵ *ibid.* p.47

positive to HIV. Prison and hospitals often segregate people with the virus and there are numerous examples of people being tested compulsorily and then detained in prisons, camps or hospitals if found to be infected. In Cuba, for instance, it's isolation test approach has been taken to its logical conclusion. People identified as HIV-positive through a program of compulsory testing have been sent to a special AIDS Sanatorium.

But mandatory isolation has failed to stop the spread of the virus in Cuba. The only way to contain HIV is to help people adopt a safer behavior. Recognizing this, Cuban authorities announced at the World Health Assembly in 1993 that as from June, isolation would no longer be mandatory. Infected people are to be given the choice between to living in the Sanatorium and living at home and receiving treatment as an outpatient. An attempt at isolating or publicly identifying people with HIV/AIDS are thus pointless. What is worse, they can actually fuel the spread of HIV; for one thing, they breed complacency in others. The people outside the stigmatized "tested" group feel invulnerable and then fail to make necessary changes in their behavior, even though there is no way to identify everyone who is carrying the virus.⁶⁶

The effect of stimulating a false sense of security are well illustrated in Germany where in certain towns prostitutes are required to be checked for certain STDs every week and should be given health inspection cards. Many customers think these "guarantee" against disease and refuse to use condoms. The problem is not common to Germany alone. An European shipbroker whose work frequently takes him to South-East-Asia, where he had a regular sex partner said, "I tell her when I am due to arrive and she has an HIV test just

⁶⁵ Ibid

before. If she has an up-to-date health card, I know I am safe." In fact, a negative HIV test is no guarantee that a person is not infected.

Fabricated test cards can be brought in many countries. At best, a test is no more than a momentary snapshot of somebody status, the person may become infected in the days or hours following the test or may already be infected but still in the window period of infection (i.e. the period before antibodies to the virus are detectable in the blood).⁶⁷

Poverty makes whole communities vulnerable to AIDS by forcing men to leave their families in search of work, by leaving people hopeless enough to turn to the solace of drugs, or by making prostitution a survival strategy for women and children. AIDS then completes the vicious circle by making the community even poorer. For example, construction workers in Thailand are mostly seasonal migrants from poor rural areas who spend months each year away from home. Their unsettled lifestyle makes them particularly vulnerable to HIV and they account for a large proportion of the country's AIDS cases todate.

Migration, often the result of poverty, is fuelling the HIV/AIDS epidemic. Male migrant are drawn to the cities, creating a male-female imbalance in the urban population that makes casual and particularly commercial sex more likely. Such as Harare and Nairobi, men outnumbered women as much as 3 to 2.⁶⁸

It is migration that often takes the heart out of communities, disrupting family life and stable relationships and loosening traditional control on behavior. Men and women try to reconstruct their lives far from home, taking new sex partners during their long absence.

⁶⁷ The Global AIDS Strategy, Geneva. World Health Organisation 1992, WHO AIDS Series (II) in AIDS images of the epidemic, p. 49

Furthermore, many who leave their homes in search of work find that prostitution offers the best and sometimes the only way of earning a living.⁶⁹

Children caught in the trap, too, are being pushed out of their homes by poverty. Around 200 million of these children are on the streets of industrialized world; 40 million in Latin America, 30 million in Asia, 10 million in Africa. Street children are extremely vulnerable to HIV infection, both because they are outside all formal structures of the society such as school, and hence are difficult to reach with health education and healthcare; and because risk-taking is part and parcel of existence on the knife-edge of survival. Many use drugs to escape from their pain, a habit that ranges from sniffing glue to injecting heroin or cocaine. However, hard drugs are usually beyond the means of destitute children, and their biggest risk of contracting HIV comes from sex. But juvenile prostitution is not limited to survival on the streets. Sometimes, poor parents sell their children to middlemen who comes to the village in search of labor-usually with some awareness that "hotel jobs" are in fact prostitution. But the same phenomenon exists in other countries where opportunities for making a living are few and far between and there are people who are ready to exploit the children of poor families. For example, certain Asia countries have for the past 20 years or so been destinations for men, mostly European seeking sex boys. Even in recent years the trade has become more organized. An expert who visited the region observed "a tourist can rent the services of a boy at the same time as he rent his accommodations and books his flight."⁷⁰

Poverty not only imposes on people pattern of living which increases their risk exposure to HIV, but it often robs them of the knowledge or the means to protect themselves.

⁶⁸ ibid

⁶⁹ ibid

AIDS information campaigns together with the research and planning needed to ensure they are effective are extremely costly. Yet the total budgets of national AIDS programs in some parts of the world are less than the cost of caring for a handful of people with AIDS in the USA. Africa, for instance, is trying to stem the tide of new HIV infection. While the continent is sliding further into debt and poverty, per capita gross national product in many countries is lower than as it was a decade ago, and many government ministries operate with reduced budgets from year to year. To make matter worse, in many parts of the developing world, educational facilities are poor and illiteracy rates are high (especially among women), making it even more difficult to reach large segment of the population with information about AIDS.⁷¹

In the rich world, it is the poorest communities that bear the brunt of HIV infection and disease. In the USA for example, Hispanics account for 25% of whom live below the poverty line, as compared with a national figure of 10% for all ethnic groups combined. This figure constitutes 16% of AIDS cases in 1991, but only 9% of the population. Africa-Americans, whose poverty is even worse, constituted 12% of the population, representing nearly 28% of AIDS cases in 1992. AIDS rates among black women were over 30%. Following an extensive fact finding mission, according to this report, "HIV cannot be understood outside the context of racism, homophobia and poverty, unemployment-pervasive factors which foster the spread of the disease. The web of associated social ills has been referred to as 'synergy of plagues'".⁷² In USA, poverty and unemployment entail much more than an inability to pay the bills, being poor is a generic risk factor, for it is associated with increased risk of becoming homeless, dying a violent death and suffering, perhaps from a multitudes of preventable illnesses. A 1990 study of mortality in New York City's Harlem

⁷⁰ Ibid p.50

⁷¹ Ibid p.51

found that black men in that community were less likely to reach the age of 65 than were men in Bangladesh.⁷³

Alcohol, too, plays a powerful and probably underestimated role in the spread of AIDS. Like other drugs, it dispels inhibitions and impairs judgment which can result in unintended form of sexual behavior. In addition, sex is frequently negotiated for fun or for money in the same place as alcohol, whether it be a party, nightclub or bar. Many of the daily problems experienced by poor people are compounded by low self-esteem and fatalism bred powerlessness. These attitudes, too, have implication for AIDS prevention, because people who feel they have no future like youngsters who have seen nothing but broken homes, joblessness and want or people confronted daily with hunger and disease, tend to wonder why they take precautions against or even care about a distant threat like AIDS?⁷⁴

Despite laws in most countries explicitly banning prostitution in minors, countless children, some not yet teenagers, are reportedly working in brothels or on the streets. Child prostitution appears to have been given a boost by clients in fear of AIDS. Pimps and middlemen play on men's fear by stressing the 'innocence' and virginal qualities of young prostitutes, which suggest they are more likely to be infection-free. But for the children, the dangers are great, the immature genital tract of young girls is thought to be extra susceptible to HIV infection, especially when ruptured by forced sex. Anal sex, to which young boys particularly will be subjected to, is a high risk practice because of the tearing of the tissues. It is impossible to know exactly how many youngsters are caught up in this illegal and secretive trade.

⁷² *ibid* p. 53

⁷³ America living with AIDS, Report by the National Commission on AIDS. No. 25 June 21, 1991, in AIDS: images of the epidemic, World Health Organization

⁷⁴ *ibid* p. 54

The trade in children is international. These youngsters from Bangladesh and India reportedly end up in brothels in the Eastern Mediterranean; while Burmese and Chinese youngsters in brothels in Thailand and young Thai and Filipinos in the brothels of Europe. Many of these youngsters are sold by their parents to middlemen who pretend to be recruiting workers for restaurants, carpet factories or domestic service, an occupation which would be damaging enough to the mental and physical health of the very young. But frequently, it is the parents themselves who offer their children to customers for sex. At a 1993 conference organized by UNESCO on "The Sex Trade and Human Rights", Dr Hoa, Director of Pediatric Hospital in Vietnam's Ho Chi Min city, reported seeing many sexually abused children brought for treatment by their fathers. She described a 12-year old as 'bleeding from her wounds and torn as if she had given birth'. The father told the reporter that they earned \$3.00, it is enough, and she can stop.⁷⁵

Paradoxically, since time immemorial, women have been blamed for the spread of sexually transmitted disease. Among certain people in Thailand and Uganda, STDs are known as women disease. By a cruel and irrational irony, simple and educated Ugandan women whose independence is seen by some men as a threat to status quo are being blamed for AIDS. In particular, women prostitutes have universally been characterized as "vectors of disease", a description that completely ignores the role played by the customer and that is strikingly never applied to men, no matter how high their levels of infection. Even people infected by other routes blame prostitutes.⁷⁶

⁷⁵ *ibid* p.55

⁷⁶ D.E. Bruyn M, Women and AIDS in Developing Countries, Social Science and Medicine, No. 34, March 3 1992, p. 249

Women who go into commercial sex working are often and extremely vulnerable to HIV infection. They may know nothing about the virus or how to protect themselves. The law and stigma associated with prostitution may make it difficult for them to acknowledge what they are doing or to seek out more experienced prostitutes to teach them to work safely. But even if they are well informed, they are apt to find it hard to insist on safe sexual practices because of fears that a client unwilling to use a condom will go elsewhere coupled with the fact that simply carrying condoms can be taken by police as evidence that a woman is a prostitute.⁷⁷

Travel is, in fact, a feature of prostitution. Young women from Myanmar cross the border into Thailand on one-day passes looking for work, sometimes under the auspices of brokers who recruit women to in the brothels along the border and force them to stay against their will. Estonian women fly to Helsinki or Stockholm for the weekend, contact clients in major tourist hotels and return home with hard currency. Czech and Hungarian women take train to Vienna on Fridays, work that night, shop on Saturday with hard currency they earned and return home on Saturday night. And women from the Philippines arrange passages to Hamburg with corrupt travel agencies that specialize in international work migration, only to find themselves caught, without proper documentation, in a trap of debts, which they can hope to pay off only through working in brothels.

Sex tourism is another aspect of the exploitation of impoverished women, though the promoters of this highly lucrative industry do their best to cover the reality of the prostitution lives behind a facade exoticism and social sanction. It is also a further demonstration of double standards, as men from the rich world or from countries where extra-marital sex

⁷⁷ *ibid*

brings harsh penalties, travel great distances to find sex partners caused by loneliness and social inadequacy, are looking for intimacy they have failed to find at home. Many are intent upon finding partners who will make none of the emotional demands of wives or girlfriends in their own countries.⁷⁸

The AIDS epidemic demonstrates as clearly as any other modern issue that the subordination of women is more than a question of fundamental injustices to one half of society. It stifles discussion between sex partners without which safe sex is unlikely to happen. This sex discrimination raises the general level of HIV infection within the community and increases the AIDS threat for everyone.⁷⁹

4.3 ASEAN Summit/Declaration on HIV/AIDS

The problem posed by HIV/AIDS has compelled continent, regions, states, etc to act together by collaborating against this modern time disease. Virtually every government both national and international in different part of the globe is conducting researches, holding conferences, symposiums, workshops and lectures in response to HIV and AIDS epidemic. Sequel to this disease problem and in positive reaction to stop the spread in South East Asia, the Association of South East Asian Nations (ASEAN) Summit/Declaration on HIV/AIDS held on 5th November 2001, at Brunei Darussalam, issued a communiqué which stated thus, "we the Heads of State and Government of the Association of South East Asian Nations (hereinafter referred to as ASEAN) recalling that the ASEAN Vision 2020, adopted by the 2nd ASEAN informal summit held in Kuala Lumpur in December 1997, envisioned ASEAN as a concert on South East Asia nations, outward looking, living in peace, stability and

⁷⁸ Esu Williams E, Keynote Address to the VIII International Conference on AIDS/STD, World Congress, Amsterdam, July 1992

prosperity, bonded together in partnership in dynamic development and in a community of caring societies; recalling the UN Declaration of commitment on HIV/AIDS adopted at the 26th Special Session of the General Assembly in June 2001 that secured a global commitment to enhancing coordination and intensification of national and international efforts to combat HIV/AIDS in a comprehensive manner; deeply concerned that the HIV/AIDS pandemic is a threat to human security and a formidable challenge to the right of life and dignity that affects all levels of society without distinction of age, gender or race and undermines social and economic development; recognizing that at least 1.6 million people are living with HIV/AIDS in the ASEAN region, and that the number is increasing rapidly through risk behaviors exacerbated by economic, social, political, financial and legal obstacles as well as harmful attitudes and customary practices which also hamper awareness, education, prevention, care support and treatment efforts, particularly to vulnerable groups; reiterating the call of the Ha Noi declaration in the Sixth ASEAN summit in December 1998 that we shall make sure our people are assured of adequate medical care and access to essential medicines and that cooperation shall be stepped up in the control and prevention of communicable diseases, including HIV/AIDS; noting the joint declaration for a socially cohesive and caring ASEAN adopted at the 33rd ASEAN Ministerial Meeting held in Bangkok in July 2000, to strengthen people-centered policies that will promote positive environment for the disadvantaged, including those who are in ill health; committed to realizing a drug-free ASEAN, as called for by the joint declaration for a drug-free ASEAN adopted by the 33rd ASEAN ministerial meeting held in July 2000 and the Bangkok political declaration in pursuit of a drug-free ASEAN 2015 adopted by the international congress "in pursuit of a Drug-Free ASEAN" held in October 2000; encouraged by the notable progress of the ASEAN task force on AIDS in responding to the call by the Fourth ASEAN summit held

⁷⁹ ibid

in Singapore in February 1992, to implement regional activities on health and HIV/AIDS aimed at curbing and monitoring the spread of HIV exchange information on HIV/AIDS, particularly in the formulation and implementation of joint policies and programs against the deadly disease; realizing that prevention is the mainstay of the response to HIV infection and that there are opportunities for the ASEAN to prevent the wide-scale spread of HIV/AIDS by learning from the experiences of some ASEAN member countries, which have invested in prevention programs that have reduced HIV prevalence or maintain a low prevalence; acknowledging that prevention, care, support and treatment for those infected and affected by HIV/AIDS are mutually reinforcing element that must be integrated in a comprehensive approach to combat the epidemic; stressing that gender equality and the empowerment of women are fundamental elements in the reduction of the vulnerability of women and girls to HIV/AIDS and that youths are especially vulnerable to the spread of the pandemic and account for over fifty percent of new infections; affirming that a multi sector response has resulted in a number of effective actions for a HIV prevention, treatment, care and support and minimize of the impact of HIV/AIDS; aware that resources commensurate with the extent of the problem have to be allocated for prevention treatment, care and support, emphasizing that the epidemic can be prevented, halted and reversed with strong leadership, political commitment, multi-sector collaboration and partnership at the national and regional levels.

4.4 ASEAN Leadership Response

ASEAN leadership responses were stated thus: "to lead and guide the national responses to HIV/AIDS epidemic as a national priority and to prevent the spread of HIV infection. Reduce the impact of the epidemic by integrating HIV/AIDS prevention, treatment, care and

support. Impact the mitigation priorities into the mainstream of national development planning, including poverty eradication strategies and sector development plans, promote the creation of a positive environment in confronting stigma, silence and denial; elimination of discrimination; addressing the prevention care and support needs of those in vulnerable groups and people at risk, particularly young people and women; and strengthening the capacity of the health, education and legal system; intensify and strengthen multi-sector collaboration involving all development ministries and mobilizing for full active participation a wide range of non-governmental organization, the business sector, media, community based organization, religious leaders, families, citizens as well as people infected by HIV/AIDS in the planning, implementation and evaluation of national responses to HIV/AIDS including efforts to promote mutual self help; intensify inter-ministerial collaboration at the national and international levels to implement HIV/AIDS programs; support strongly the mobilization of technical, financial and human resources to adequately advocate for and implement national and regional programs and policies to combat HIV/AIDS, including efforts to promote mutual self help.

4.5: Regional Activities In Support Of National Programs

Continued collaboration in regional activities that support national programs particularly in the areas of education and life skill training for youths; effective prevention of sexual transmission of HIV, monitoring of HIV, STDs and risk behaviors, treatment, care and support for people living with and affected by HIV, prevention of mother to child transmission, creating a positive environment for prevention, treatment, care and support, HIV prevention and care drug users and strengthening regional coordination among agencies working with youths.

Joint regional actions strengthen regional mechanisms, increase and optimize the utilization of resources to support joint actions to increase access to affordable drugs and testing re-agents, reduce the vulnerability of mobile population to HIV infection and provide access to information, care and treatment, adopt and promote innovative inter-sector collaboration to effectively reduce socio economic vulnerability and impact.

Monitoring and evaluating the activities at all levels as well as systematic conduct of periodic reviews and information sharing with the full and active participation of non-governmental organizations, community-based organizations, people living with HIV/AIDS will help vulnerable groups and others carriers of the disease.

4.6: Organizing the Fight Against HIV/AIDS

Information is the first step to every healthy choice. Improvements in our health depend on us taking control over and responsible for health as an important component of our every day lives. This active participation requires full and continuing access to information. Information about our bodies, their workings in health and illness, and the services available to us in treatment and cure, support and cooperation.⁸⁰

In 1980, the American Surgeon General produced an influential report called "Health People". The report states "you, the people, can do more for your own health and wellbeing than any doctor, any hospital, any drug, and any exotic medical device". This is not a radical statement as it might at first seem to be. As we approach the year 2000, there is a growing

⁸⁰ Robert Gann, The Health Information Handbook, Resources for Self Care, Gower Brookfield, Vermont, USA, 1986, p 1-5

recognition that following eras of advances in public health and medical sciences, the key to further real improvements in health is the involvement of the informed individual in his own wellbeing.

The British Department of Health and Social Security had produced a similar statement four years earlier. Prevention and health is everybody's business which placed responsibility for health firmly on the individual. The central message was clear, only you can make the decisions to choose a healthy lifestyle. Again in the same Britain, the public health involvement, which developed from the pioneering work of Chadwick and other reformers, was every effective in combating communicable disease. The reforms were based on engineering methods and there were tremendous advances in safe water supply, better sewerage, housing and more efficient agriculture leading to cheaper food. The World Health Organization (WHO) held international conference on Primary Health care at Alma Ata in the USSR. The conference affirms the paramount importance of primary care as ".... essential health care made universally accessible to individuals and families in the community by means acceptable to them". The conference was chiefly notable for the statement of the goal of health for all by the year 2000 and the agreement by 134 nationals of the Declaration of Alma Ata, the fourth point of the ten point declaration is particularly significant.

This declaration noted that the people have a right and duty to participate individually and collectively in the planning and implementation of their health care. This right and duty was reiterated on the report of WHO's working group on information and health which met in

Luxembourg in 1980 and concerned itself with ".....the right of the patient not only to receive full information about his status but also to have some say in decisions affecting his health".⁸¹

Indeed, over the past ten years, the position of World Health Organization has consistently underlined the importance of informed self-care and participation, because health science and technology have come to a point where their contribution to further improvement of health standards can make a real impact only if the people themselves become full partners in health protection and promotion-creating awareness by voluntary community and commercial organizations of the need to harmonize their efforts to ensure that the community has a positive approach to health promotion and preventive medicine-identifying the resources in the informal and organized voluntary sectors, the private sector and the statutory services enabling them to operate together in a concerted way-giving people the information they need to make sensible decisions about personal health and encourage the community responsible attitudes to health matters.

There are two clear messages here; the individual needs information to enable decision-making in health. But the health authorities also need up-to-date information on resources available from the voluntary sector to ensure cooperation and concerted approach to health care. Information is a two process. The individual health care consumer needs information in order to participate in his own health care and use health care resources. In return, he can feed information on his needs and preferences back to the health care providers. Studies have shown that family friends and neighbors are primary sources of information. A large-scale study of information needs of elderly peoples showed that 30% turned to their family for advice and 14 % to neighbor. The most pervasive source of

⁸¹ ibid

information is the media. Health education forms part of basic education in schools and may be a continuing influence using the power of the media.⁸²

According to Professor V. Ramalingaswami, to care is a duty, to prevent is a responsibility. Prevention and care are the twin engines that should drive our efforts in the containment of AIDS, unlike other epidemic diseases such as Cholera or Measles. HIV infection does not cause sudden wide spread of death, but remains hidden for years after it begins to spread. This characteristics coupled with the fact that AIDS involves behavior that many societies condemn, like open discussion of sexuality etc are the big obstacles to setting up programs to fight the epidemic. In view of the above circumstances, therefore, the task of national AIDS programs is in three fold: to provide policies, information, campaigns, health and social service that people need in order to protect themselves from HIV infection; meeting expanding need for care of those who are infected with HIV and go on to develop AIDS; to plan for and cope with the triple effects of AIDS.

Above all, the national program should provide coordination and a technical support structure for all those working in the field. These include government officials from health sectors, blood bank staff, nurses in primary health care clinics, members of the media and business communities, private individuals and a watch of non-governmental organization and mobilizing the people at the grass root of their own countries. National programs although are working in some places on a wide range of activities but often face constraints like poverty, political instability and war. A good example of what is happening in many countries is provided by Malawi, one of the world's poorest nations. Malawi is host to

⁸² ibid

hundreds of thousands of refugees from war ravaged Mozambique and is in the grip of one of the worst AIDS epidemics in Africa.

The AIDS programs work through with many different social and community organization, who deliver information, care and support to people at the grass root, using the young pioneers who have received AIDS information and training in peer education and also Moslem leaders who have been trained in workshops on AIDS prevention and counselling of people with HIV infection or AIDS can discuss the subject at Friday mosque. The media role in organizing this fight is indisputable. The newspaper and radio programs should cover AIDS issues, making frantic and particular effort to address fears and correct misconceptions. Local choirs should take part in AIDS song contests, popular musicians write and record music with AIDS theme, cinema houses, drama group, excursion trip, drama group perform plays and AIDS comics are produced for kids, showing genuineness in spreading the words about AIDS.

AIDS prevention is still a journey through uncharted territory and programs are changing and adopting in the light of experience all the time. For example, a number of countries including Australia, Brazil and the United Kingdom, originally tried to instill fear as a way of encouraging people to change their behavior. Posters and newspapers advertisements showed coffins being lowered into the ground depicting death. But this quickly proved counter productive, tending to increase stigma and kindle prejudice against infected persons rather than encouraging uninfected to take stock of their own behavior. Besides, it had the effect of increasing anxiety in people who had power to correct themselves.

4.7 Social Mobilization against HIV/AIDS

Everyone in your community needs to do their part in this effort; some may care and provide for people with AIDS, others may provide kindness and compassion for the families and friends of people with AIDS. In response to the emergence of AIDS in your district, the school, the municipal government, or the community hospital may have already initiated many activities to provide care for the people with HIV/AIDS, both in the hospital and in the community, perhaps the hospital is far away and its services do not touch many of the people suffering from the disease. Every community has potential for change which can be recognized and encouraged.

The community response to AIDS must be built on the cooperation of community members, as most of the rural population has close links and many individuals have known each other since childhood, family members always stay together and form the characteristics of the extended families.

Mobilize spiritual, moral and social support from PWHAs from monks and other religious organizations could play important roles in reducing the impact of HIVS/AIDS within their community.

Home health care is a very important element of community mobilization. In fact, for most PWHAs in the world, it is the first and primary place of care. PWHAs need to understand that hospital can support home-based care, but cannot be with patient at home. However, many but different types of people in the community may contribute to home care, shared through a rotation of duties among several families. This will increase mutual support and

share the burden care. This rotation could be on the basis of taking turns with specific tasks such as food preparation or washing clothes or visiting people living with HIV/AIDS (PWHA), on different days of the week. To initiate these home care services, one effective strategy is to encourage the involvement of religious organization such as the Monks, Christian groups, Imams and social welfare workers in order to provide friendship, moral and material assistance. Home care can be an effective way to improve their behavior, attitude and feelings of HIV infected/AIDS patients, their families and communities.⁸³

In conclusion, as more and more people from all walks of life, join a multi-sector response to AIDS, the twin priorities remain prevention of HIV infection and care of those infected. Prevention measures such as health education, condom promotion and protection of blood supply have an effect all the way down the line.

The task ahead calls for clear vision, renewed will and greatly increased resources. But it also calls for greater determination than hitherto to use those resources in the interest of everyone. AIDS must not be allowed to join the list of problems like poverty and hunger that the world has learnt to live with because the powerful have lost interest, and the powerless have no choice.

⁸³ Our families, our friends. An action Guide, Mobilize your community for HIV/AIDS prevention and United Nations Development Program. South East Asia HIV Development Project 2001. p 10, p21-27