# AIDS IN DEVELOPED AND DEVELOPING COUNTRIES -HISTORY AND EMERGING TRENDS

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"Poverty makes whole communities vulnerable to AIDS by forcing ment o leave their families in search of work, by leaving people hopeless enough to turn to the solace o drugs or by making prostitution a survival strategy for women and children. AIDS then complete the vicious circle by making the community even poorer".

## WHO REPORT

#### INTRODUCTION

Ten years ago, the acronym AIDS WAS BARELY KNOWN. By 1994, more than 3 million people world wide had developed the fatal condition denoted by these four letters. AIDS, the phantom popping out of modern civilisation, which has been haunting the developed countries, is now on its deadly march, stalking stealthily along. We to the inhabitants of the underdeveloped and developing countries, which are caught unawares and are defenceless against the unknown killer disease. The scourge of AIDS has already created enormous problems to the entire human race, having suddenly surfaced as a major challenge.

The most alarming aspect of AIDS is that it spreads fast. The first American case arose in 1978 and in the next few years, the number of cases doubled every six months. It was presumed that the disease was restricted to homosexuals only but the spell was broken when AIDS was reported in

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intravenous drug users, haemophiliacs and other blood recipients from infected donors.

# HISTORY

In the history of medicine, there have been outbreaks of new disease, engulfing large sections of the population, with devastating consequences. But AIDS has surpassed all the epidemics known earlier.

Acquired Immuno Defficiency Syndrome (AIDS) is caused by the Human Immuno Defficiency Virus, which is now the most thoroughly studied virus. Its origin is uncertain. It was noticed in late 1970's that some young and highly promiscuous male homosexuals in America. Particularly in San Francisco and New York began to fall ill in a very mysterious way. They began to die of infections which normally are easily curable, the most common ailments being very severe pneumonia and very rare type of skin cancer. It remained a mystery. Efforts were than made to uncover the mistery of this new disease; But by the time it was identified and named in U.S.A. and Europe, the disease was already revalent in Africa. It is now recognised in almsot all countries of the world.

It was initially detected, and officially recognised for the first time in June, 1981 at the Centre for Disease Control, U.S.A. in previously healthy homosexual men from Los Angeles, dying of varied disease symptoms. And soon the killer disease assumed epidemic proportions. By 1993, over 25 lakh people world over had developed the fatal condition denoted by the four frightening letters, AIDS. And the epidemic continued engulfing country after country. Everyday well over 5000 people are infected by the virus - most of them young or middle aged on whom families, communities, and economies depend. It is predicted that by the end of this decade, a cumulative total of 4 crore people will have been infected which is more than all those killed in the second world war.

AIDS descended, as a curse, upon the developing countries, which have been already groaning under problems of their own. The prevalence rate even in India, of HIV positive persons at the end of 1992 was 7.1 / 1000 in the high risk groups. It is unfortunate that the country with its huge population steeped in poverty and ignorance, grappling with problems galore is now called upon to face the challenge of this much dreaded menace. What was till recently a distant prospect on the horizon is now at our doorstep, threatening to become a major problem to be tackled on several fronts including legislative action. Dr. Maxine Ankran succinctly remarks;

"AIDS challenges our ethical and moral foundations as no disease has ever done. If we can build an ethic of caring into all our scientific thinking, our scientific work, our scientific enterprise, we will go that extra mile, because we are one family."

#### AN OVERVIEW OF THE GLOBAL SITUATION

The infection has enormous social, economic and behavioural impact on individuals, families, communities, and the whole world. It has stattered the global economy with no solace in sight - no vaccine to prevent and no treatment to cure. Statistically there is considerable under - reporting as all cases are not reported. In 1991, the World Health Organisation forecasted that AIDS cases could triple during the next five years, on the basis of the existing accelerated growth of the epidemic.

According to the WHO, 10-12 million adults and children world wide became infected, some 2 million of them having developed AIDS, as the last stage of infection with the HIV. By the turn of the century, it was estimated that the number infected will have risen to about 40 million people of whom about 18 million will have developed AIDS. The WHO projections also predicted that there will be several lakhs infants born with AIDS, most of whom will die before the age of five years. Surely the situation is helpless and cataclysmic, calling for an expeditious, internationally co-ordinated action, on a war footing.

(Tables showing the educational, economic and health status of countries, Region-wise, together with the levels of AIDS affliction are appended to this paper)

#### TRENDS IN DEVELOPING COUNTRIES

Nearly 90% of the projected HIV infection for this decade will occur in the developing countries, according to the estimate of the world body. The situation in Sub-Saharan Africa is already critical with 7 million infected individuals. In south Africa AIDS had been mainly found among the white homosexual population and has started appearing in the Black population. In Asia which holds half of the world's population, there has been phenominal rise of HIV between 1987 and 1992. By the late 90's, at the present rate, more Asians than Africans will be infected every year.

Latin America and the Carribean were estimated to have over one million HIV positive adults. The brunt of the AIDS epidemic is thus increasingly being borne by developing countries. More than 1.5 million men, women and children in Asia and the Pacific Region have been infected with HIV and 40,000 of these have developed AIDS. Among drug addicts, the rise in HIV infection has been explosive.

In India's North-East States, prevalence rose from less than 1% to 50% in just one year. The epidemic has its eightest grip on the poorest

countries. AIDS and poverty are hand in glove, with a deadly symbiotic relation between them. Within rich countries also, the highest concentration of AIDS / HIV coincides increasingly with pockets of misery and deprivation, mostly in urban slums. The care of an afflicted patent involves enormous cost that the victim is left with no other alternative than to suffer and surrender to the disease that inexorably ends in a slow death.

## THE ALARMING EXAMPLE OF THAILAND

Thailand as the highest incidence of the infection in Asia, about 10 of this dying of AIDS every day. This country has now become a favourite testing ground for the AIDS vaccines developed in the U.S.A. The country with its good medical network, offers favourable conditions testing and experimetnation, particularly as the government is deeply committed to arrest the onslaught of the disease by all the means at its disposal. According to studies, the number of HIV infection is expected to rise from 8 lakhs to 43 lakhs in the next five years in Thailand, thus endangering the continued economic growth of this south-east Asian Nation. Some cities in bangkok, contend that the U.S vaccines do not suit the third world and are opposing the ongoing U.S. experimental programmes. The example of Thailand tells us how rapidly the situation can change.

It is evident that most of the developing countries are getting into the AIDS trap, while some are already entangled in it.

#### THE INDIAN SCENARIO

Undoubtedly, India is emerging as a new centre of the disease along with Thailand and Myanmar. According to the WHO, India, by the turn of the century will have 10 lakhs of people with AIDS and 50 lakhs HIV positive. The portent is indeed terrifying. Eversince the alarm was sounded by the maharashtra government over the disturbing rise in the number of HIV positive cases, the trend has been continuing, unabated. As the virus has a long incubation period, it is difficult to estimate from the sample surveys, how men, women and children abve been actually infected with it. Till a rigorous surveillance effort is launched, thousands of men and women around the country will be transmitting the infection without even the knowledge that they are carriers of a deadly disease. Considering that two-thirds of the HIV positive population are aged between 20 and 40 years, its economic impact is simply frightening. Governmental efforts and the prevention and control strategy are found wanting. Ignorance is the greatest challenge and a stumbling block on the way.

Surveys show that more than 90% of truckers in and around Calcutta visit at least one commercial sex worker a week and 68% never use a condom. To top it all, ther seems to be ignorance or may be - indifference even among doctors who should be the front line soldiers in the fight against AIDS; 81% of doctors questioned in Bangalore still believe that there is nothing wrong in reusing a syringe, if the needle is changed.

To add to these difficulties, 26% of the 1.95 million units of blood generated in the country is from the highrisk professional donors. If the trends are allowed to continue, India will probably replace Africa, on the AIDS map, in the coming decade.

## **RESEARCH PROVIDES NO IMMEDIATE HOPE**

For the present, we have to come to compromise with the relaity that there is no vaccine to prevent the infection, nor a medicine to cure the disease, except A.Z.T. which is found not so effective, as a specific. However, research workers today are busy the world over, in finding an effective vaccine against the virus. Hectic activity is going on, in all the premier research organisations to that end. It may take quite some time before the vaccine and the specific drug are invented. In the mean time, all our efforts should centre round the ways and means of preventing further expansion of the infection.

Even the existing tests in vogue to detect HIV positive cases entail long and tiresome procedures. But the recently reported success of the Biochemists of the Delhi Unviersity comes out as a ray of hope amid the encirciling gloom. They have evolved a process of international significance by which AIDS ifnection in a person can be tested in the unbelievably brief period of 10 seconds. It would prove a blessing to the developing countries. Surely a step forward, it would make detection easier, when it comes into use expectedly by next years.

#### PATTERNS OF TRANSMISSION AND THE DEVELOPING COUNTRIES

Sexual transmission accounts for approximately 75% of all HIV infections world wide. Distribution of the modes of transmission as in 1993 is as follows:

Sexual Intercourse	70-80%
Mother to Child	5-10%
Neelde Sharing by drug users	5-10%
Blood Trnasfusions	3-5%
Accidental needle sticks to health care workers	0-01%

The pattern of trnasmission of AIDS differs betwene countries and sometimes within a country. Who has identified three overlapping patterns of occurrence of AIDS. PATTERN I : U.S., EUROPE, CANADA, MEDICO, AUSTRALIA:

Mostly spread through homosexuals but beginning to spread to the heterosexual population, mainly men. Also found increasingly in intravenous drug users.

PATTERN II : AFRICA AND INCREASINGLY IN SOME LATIN AMERICAN COUNTRIES

> Mostly heterosexual srpead with equal or slightly more females to males. Increasing numbers of babies born with HIV from mothers. Infection through blood transfusion is still taking place although transfusion services are now being strengthened. Transmission through intravenous drug use is low.

# PATTERN III : EASTERN EUROPE, NORTH AFRICA, MIDDLE EAST, ASIA AND MOST OF THE PACIFIC EXCEPT AUSTRALIA

Only a small number of cases, mainly of persons travelling to patterns I and II countries. The exception is Thailand where intravenous drug abuse has become a major route of transmission.

While the largest number of cases are reported in the America, it is in the developing countries, especially Africa, that the situation is most worrying. A deteriorating economic situation, poverty, political unrest and unemployment have led to increased migration, refugee problems and the weakening of traditional stable family patterns. There has been rapid expansion of cities with urban problems of unemployment, prostitution and "street children". All of these factors contribute to the spread of AIDS.

Developing countries do not have the resources and infrastructure of health services, communication media and trained field staff that industrialised countries are able to press into service for treatment of AIDS patients and mounting of programmes of screening and public education.

## INTERNATIONAL ACTION AND THE W.H.O.

Under the global leadership of WHO, most developing countries have undertaken short-term plans for control of AIDS and many have even progressed to medium term plans. These involve the intensive mobilisation of large number of organisations, groups, field workers and individuals to participate in public education programmes. Educational strategies are being developed that are appropriate to the patterns of transmission, available resources and cultural settings that exist in developing countries. Everyone, both professional and lay, has a role to play in these programmes.

The cornerstone of the WHO programme has been to stimulate and provide support for AIDS prevention activities within each country of the world, while encouraging international cooperation in research, information exchange and training. The two years following the establishment of this global programme have seen remarkable developments at an unprecendented pace compared with any other disease in all human history. Every country in the world has formed a national AIDS Committee, which is responsible for producing a national plan which usually cover:

- The development of public education programmes.
- The strengthening of blood transufsion services and the development of laboratory capability of screening all blood products for HIV.
- Setting up of surveys of the population for HIV to determine levels of HIV infection in the public.
- Training of health workers and other caring professions e.g. teachers, social workers in services and public awareness.

- Development of counselling services to affected members and their families.
- Provision of care and support for AIDS patients and their families.

# IN CONCLUSION

The trends are clear and the future is challenging. Developing countries have no girdle their loins and take speedy steps towards prevention, detection and amelioration, on the individual, educational societal, executive health and legislative planes. The present laws have to be re-examined and modified wherever necessary with a \_\_\_\_\_\_ to chekc and to contain the advancing socourge. The following areas deserve special attention for enactment and enforcement of suitable new laws to meet the demands of the situation, in addition to the above precautions:

- 1. Sex: Commercial sex workers and STD's periodical checks, certification and eudcation; use of condoms, jellies and other checks to be enforced towards safer sex.
- Screening, Vaccination etc. to be made obligatory on the part of every citizen. Testing clinics at the District level all over the country; A statutory obligation of every state.
- 3. Severe punishment to Doctors violating the principles of controlling AIDS.
- 4. Use of disposible syringes to be enforced by law.
- 5. All blood donors compulsorily to be screened before accepting blood for transfusion.

- 6. Prevention of pregnancy in HIV posititve women.
- 7. More rigorous approach to non-availability of drugs together with rehabilitative facilities for liberated addicts.
- 8. Enactment of law making AIDS to form part of curricula in all parts of the country.
- 9. Enforcement of display, broadcast, telecast and print of messages on all public places, Cinema halls and all mass-media, as a statutory obligation.
- 10. Funding all reputed N.G.O. and women's organisations for creating greater awareness and counselling services.

We have no room for complacence and no time to lose. Strict enforcement of all preventive measures together with stimulation of and liberal patronage to the native research effort, on a war footing is the need of the hour.