

### CHAPTER 1

#### INTRODUCTION

#### "AIDS" - The Killer Disease.

AIDS is a disease caused by a virus called 'Human Immuno Deficiency Virus or HIV. The word AIDS stand for Acquired Immuno Deficiency Syndrome. It means deficiency in body's immune system other than congenital or iatrogenic causes. Till today, there is no curative treatment of AIDS and no vaccine is available in the market for use. The drugs which are available only improve clinical signs and delays death of AIDS patients temporarily. So, the disease is fatal. Once the virus enters into the body, the infection slows down the victim' sactivities and vitality. It is 100% fatal. So, it is a killer disease.

The disease was first noted in 1981 in U.S.A. and the the virus was isolated in 1983 by French Scientist, Dr. Luo Montagnier of Pasteur Institute. The virus is now internationally known as 'HIV'. Since the first case of AIDS reported in 1981, and a period of just 10 years after, it has presented itself as a major life threatening, global health problem. The World Health Organization has estimated that, as of mid 1995, more than 18.5 million0 HIV infections have occurred since the early 1980s. For the year 2000, the current

WHO projection is that a total of 30 to 40 million HIV infections will occur (1).

The number of HIV/AIDS cases is increasing more rapidly in Asian countries. WHO estimated that in 1995 about 3.5 million people have been infected with HIV/AIDS in Asia, and the cumulative infection in the region is expected to quadruple to more than 10 million by the year 2000. At present, the largest number of cases are found in India, Thailand and Myanmar.

HIV infection is increasing more rapidly in South - East Asia (SEA) according to the report from the SEARO (1995). The situation of HIV/AIDS in SEA is shown in Table 1.1.

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Table 1.1. Situation of HIV/AIDS in SEA Countries (May 1995)

Country	Reported AIDS cases	Estimated HIV cases
Bangladesh	1	<20,000
Bhutan	0	<300
D.P.R Korea	0	<1,000
India	1,108	1,500,000
Indonesia	69	34,000
Maldives	2	<100
Mongolia	0	<200
Myanmar	475* <sup>1</sup>	150,000
Nepal	51* <sup>2</sup>	<10,000
Srilanka	48	<1,000
Thailand	17,844	500,000
Total	19,582	2,000,000

Note: \*1 (as of December 1994) \*2 (as of December 1995)

Source: SEARO Report (1995)

India has been identified by WHO as one of the two most AIDS prone countries in South-East Asia, while the other country is Thailand. It has been estimated that if the transmission of HIV continues at the present rate, then there will be about five million person infected with HIV and one million full-blown AIDS cases in India by the year 2000 A.D.

HIV spreads mainly through blood, semen and vaginal fluid. It is transmitted in 3 ways. Through sexual activity, mostly sex with prostitutes or homosexuality and it is

estimated that 75% of all global infection are as a result of sexual transmission. Next is through blood transfusion, blood contaminated needle, sharing of syringes and needles amongst the drug addicts or through sharp skin piercing instrument, if it is not properly sterilized. Ten per cent of all global infection is due to sharing of syringes amongst the drug addicts. The other way by which HIV is transmitted is from HIV infected mother to child (vertical transmission) just before, during or after birth and ten percent of the global infection has occurred by this way.

It is equally important to understand how HIV is not transmitted. There is neither evidence to suggest that HIV can be spread by casual contact nor through the respiratory route. It is not transmitted by shaking hands, hugging, kissing on the cheek or forehead, using common utensils, telephones, toilets, swimming pools or through coughing or sneezing. So, eating from the same plate, playing together with an AIDS patient, working in the same office, travelling in the same public transport, attending the same school or college are not at all hazardous. There is no person to person spread and the AIDS patient can be managed at home and so the dictum is that "isolate the infection, not the patient". Extensive and careful studies have shown that mosquitos and other blood sucking insects do not transmit HIV infection (1).

In Nepal, the first case of HIV infection was detected in 1988. Since then, according to official records, at least 35 persons have already lost their lives because of AIDS, 47 persons have full blown AIDS and 386 persons have been confirmed HIV positive in Nepal. Table 1.2, 1.3 and 1.4 below shows HIV/AIDS cases in Nepal in Dec. 1996, according to the Ministry of Health (2).

Table 1.2. HIV/AIDS condition in Nepal

Condition	Male	Female	Total
HIV Positive	192	194	386
AIDS Cases	35	47	82*
Total	227	241	468

Table 1.3. HIV/AIDS in Nepal according to the mode of transmission

Sub- groups	Male	Female	Total
Sex workers (SW)	190-50	208	208
Client of SWs/STD	216	11	227
Housewives	45.0	20	20
Blood Transfusion	NN	1	1
Drug users	9	1	10
Perinatal Transmission	2	-	2
Total	227	241	468

Table 1.4. Number of cases of HIV/AIDS in Nepal according to age group.

Age group	Male	Female	Total
0 - 5 Years	2	-	2
6 - 13 Years	-	-	-
14 - 19 Years	15	89	104
20 - 29 Years	146	125	271
30 - 39 Years	50	24	74
40 - 49 Years	13	3	16
50 Years above	1	/   -	1
Total	227	241	468

<sup>\*</sup> Death - 35

The situation in Nepal, though not frightening, is quite serious due to open border with India where HIV/AIDS is catching up fastest (Appendix 5). Migrant and seasonal workers from both sides cross the border during the whole year.

Another factor which causes fear of the spread of HIV/AIDS in Nepal is girl trafficking. According to Durga Ghimire, President of women's welfare group about 5,000 to 7,000 Nepali girls go to India every year for prostitution. There are approximately 40,000 to 50,000 Nepali females who are currently working in the sex industry throughout India. When they are found positive for HIV, they are forced to return and spread the disease in Nepal. There are more than 50 percent of the girls, who have AIDS in Nepal and were prostitutes who returned from India, according to Ghimire (3).

Since no red-light area exists in Nepal, commercial sex workers (CSW) carry out their business clandestinely making the risk behavior which are very difficult to trace. Most of them had never heard about HIV/AIDS.

A basic survey recently done by NGO with 201 CSWs in Kathmandu found that 93 percent CSWs had never heard about HIV/AIDS and only 12 percent were aware about HIV/AIDS.

Another survey done by NGO found that only 7 percent of the CSWs knew about safe sex and only 19 percent knew the use of condom. Kathmandu was estimated to have some 5000 CSWs (3).

HIV/AIDS is also spreading in Nepal via drug addicts sharing contaminated needle. However, an infected blood supply in medical facilities is a concern, as well as the wide spread ignorance of people about the preventive measures of the infection.

Official statistics on HIV which causes AIDS are incomplete due to insufficient testing. Government reports show only 468 HIV/AIDS cases in Nepal. This figure was based on the blood sampling of 200,000 persons out of 21.1 million population of Nepal (4). But the World Health Organization estimated that some 20 thousands have been infected by HIV/AIDS in Nepal at present and the number would cross

100,000 by the year 2000, and it was estimated that it would double each year (3).

# 1.1 Introduction of the Nursing Campuses in Nepal:

The nursing education program in Nepal was started in 1956 by His Majesty's Government (H.M.G) with the help of two nurse educators sent by the World Health Organization. From 1956 to 1972, nursing education was controlled by H.M.G. Ministry of Health. In 1972, as a new change in nursing education, nursing school became part of the university. Since then nursing program is operated by the Institute of Medicine, Trivuwan University (TU IOM). The nursing campus is autonomous part of the administration within IOM. The head of the nursing campus is called the campus chief and responsible to the dean of the Institute of Medicine. present, it has seven nursing campuses throughout the country. Three of these campuses are in Kathmandu. The remaining four campuses are in four different zones. All nursing campuses are under TU.IOM academically but financially two nursing campuses are under their own organization. The two nursing campuses are Lalitpur nursing campus under United Mission to Nepal (UMN) and Bir Hospital nursing campus under Bir Hospital (government Hospital). The other 5 nursing campuses (Table 1.5) are under TU both academically and financially.

The nursing campus within the Institute of Medicine offers three levels of nursing education programs, the three year certificate level, which is a basic nursing education program, Bachelor's degree level, which is a post basic nursing education program and Master's degree program. All seven nursing campuses offer certificate level programs. A Bachelor of nursing is offered at two nursing campuses, Maharajgunj nursing campus and Lalitpur nursing campus, both of which are in Kathmandu. The Master degree program offered at Maharajgunj nursing campus only. Each year about 280 graduate nurses were produced from these campuses.

Table 1.5. Nursing campuses and number of students in 1996

No	Nursing Campus	Location	No of students
1	Maharahgunj N. Campus	Kathmandu, Central region	148
2	Lalitpur N. Campus*	Kathmandu, Central region	130
3	Bir Hosp. N. Campus*	Kathmandu, Central region	108
4	Pokhara N Campus	Western region	120
5	Biratnagar N.Campus	Eastern region	90
6	Birgunj N.Campus	Southern region	90
7	Nepalgunj N.Campus	Far eastern region	90
Total 776			776

<sup>\*</sup> Under TU IOM academically only

## 1.2 Rationale and Background:

There was no study on knowledge and attitude about HIV/AIDS among nursing students in Nepal. So the investigator wanted to carry out a research in this area to evaluate the knowledge and attitude of nursing students about HIV/AIDS. This study centered around the knowledge and attitude of the 1st, 2nd and 3rd year certificate level nursing students about HIV/AIDS, who are the most concerned persons to give competent and safe nursing care to HIV/AIDS patients.

Nursing students are the nurses of the future. As future health care providers for the growing number of HIV/AIDS patients in Nepal, nursing students need to be knowledgeable about HIV/AIDS. They need accurate information about HIV/AIDS, knowledge about management and care, transmission and universal precaution.

Although the universal precautions suggested by the C. D. C is observed its implementation was not adequately applied in some of the hospitals and almost all of the health centers in Nepal. This might be due to the lack of adequate supply of facilities or lack of knowledge on HIV/AIDS and universal precautions. The reported results of one survey conducted in Chicago indicated that more than half of all hospitals provided neither special education on HIV/AIDS nor an adequate supply of gowns, masks and gloves for their

employees nearly 40 percent fail to supply puncture- resistant containers for disposal of needles (5).

Moreover, a survey conducted at San Francisco General Hospital, showed that less than one third of respondents followed C.D.C guidelines, and another 56 percent used inadequate precautions (6). So there is still chance of being occupationally exposed to HIV/AIDS if the care giver does not take necessary universal precautions while taking care of HIV/AIDS patients.

A study conducted in 1990 found that of 323 nurses surveyed in a large medical center in Chicago, 64 (20%) reported HIV exposure. So nurses need to be knowledgeable about the disease, and the care of the patients and universal precaution in order to prevent themselves from occupational exposures (7).

Nurses are the backbone of the health care delivery system and the most important group of health workers nearest to the client. All clients need special and comprehensive care by the nurse. But nurses are fearful of AIDS and most of them refused to care for a client who is HIV positive because of untreatable and deadly disease. In many countries, nurses have changed their jobs or left the profession entirely to avoid direct contact with AIDS patients (8).

In Nepal also, most of the health personnel including doctors and nurses are fearful to care for HIV/AIDS patients. In some hospitals in Nepal, it was found that nurses including doctors refused to care for HIV/AIDS patients. One reason for refusing to care for HIV/AIDS patients might be due to the lack of knowledge about HIV/AIDS.

A study conducted at USA in 1988 about nursing students' attitude towards AIDS, showed that the students who were highly fearful about AIDS patients were not only much less willing to care for AIDS patients but they also do not want to be assigned to those patients as students (9).

Some studies have found that increasing knowledge about AIDS among health care professionals results in more positive attitudes towards AIDS patients (10).

In summary, nurses more than any other health care professionals are on the "front line" for AIDS patients care. So nurses need to be knowledgeable about AIDS. They need to be updated with facts and knowledge regarding AIDS, so that this can be prepared nurses not only to give safe, competent and compassionate care to AIDS patients, but also to prevent the spread of the disease to themselves and to protect patients with AIDS from exposure to opportunistic disease.

Taking all the information above into consideration, this study was carried out with the hope that it could help to modify the essential HIV/AIDS content in the curriculum of certificate level of nursing students and to improve the attitude of nursing students in caring for AIDS patients and for preparation of nursing students to cope with the challenge of taking care of HIV/AIDS patients which might increase in the near future in Nepal.

