CHAPTER – I

INTRODUCTION

Of all kinds of happiness the best happiness is good health, that is freedom from all worries about one’s body or disease. Man has been trying to control diseases from the time immemorial and thus medicine was invented based on the past knowledge. But this was not the end of the story; it is still developing and is facing newer challenges of different nature. HIV and AIDS are among those which have now become a threat to mankind and civilization in many ways and it is so because of its longer incubation periods and the mode of spreading among people all over the globe.

It is now a well established fact that, Acquired Immune Deficiency Syndrome (AIDS) is a disease of the human immune system, caused by the Human Immuno Deficiency virus (HIV). This virus targets the immune system of the body’s defense mechanism, which protects our body from all kinds of infections. As our immune system gets progressively disabled by the illness, the victims are more likely to get infected by all sorts of opportunistic diseases and tumors that do not affect person with a healthy immune system. This susceptibility gets worsen as the disease continues. (Weiss, 1993).
HIV is a lenti virus, and like all viruses of this type, it attacks the immune system. Lenti viruses belong to a larger group of viruses known as retroviruses. The name 'lenti virus' literally means 'slow virus' because they take long time to produce any adverse effects in the body. They have been found in a number of different animals, including cats, sheep, horses and cattle. However, the most interesting lenti virus in terms of the investigation into the origins of HIV is the Simian Immunodeficiency Virus (SIV) that affects monkeys, which is believed to be at least 32,000 years old (UNAIDS 2011).

It is now generally accepted that HIV is a descendant of a Simian Immunodeficiency Virus, because certain strains of SIVs bear a very close resemblance to HIV-1 and HIV-2. HIV-2 for example, corresponds to SIVsm, a strain of the Simian Immunodeficiency Virus found in the Sootymangabey (also known as the White-collared monkey), which is indigenous to western Africa. The more virulent, pandemic strain of HIV was identified as HIV-1. The closest counterpart of HIV-1 identified in 1999 was SIVcpz, the SIV found in chimpanzees. However, this virus still has certain significant differences from HIV. (AVERT, 2011).

The first recognized case of AIDS was detected in USA in the early 1980s. A number of gay men in New York and California suddenly began to develop a rare opportunistic infection and cancer that seemed stubbornly resistant to any treatment. At this time, AIDS did not yet have a name, but
it became obvious that all of them were suffering from a common syndrome (AVERT 2012).

There was no real idea about the causal organism, how the epidemic spread across the globe, and how many millions of lives were affected, and consequently it was not possible to develop the preventive measures against it. The HIV/AIDS epidemic is a global human tragedy, especially in sub-Saharan Africa. It is in Africa and in some of the poorest countries of the world, the impact of HIV has been found to be the most severe.

Outside sub-Saharan Africa, the Caribbean has the highest HIV prevalence. In the most affected countries of the Caribbean, the spread of HIV infection was driven by unprotected sex between men and women, although infections associated with injecting drug also were common in places like Puerto Rico (UNAIDS 2010).

Around 1.5 million people were living with HIV in Latin America at the end of 2010. During that year, around 67,000 people died of AIDS and an estimated 100,000 were newly infected. The HIV epidemics in Latin America was highly diverged, and were fueled by varying combinations of unsafe sex (both in between men, and between men and women) and injecting drug. In all the countries the highest rate of HIV infection were found among men who have sex with men, and the second highest rate were found among female sex workers. (UNAIDS 2011).
Among the rich nations HIV infections have historically been concentrated principally among the injecting drug users and gay men. These groups are still at high risk, but heterosexual intercourse accounts for a growing proportion of cases. In the United States, a quarter of people, diagnosed with AIDS in 2008 were female, and three quarters of these women were infected as a result of heterosexual sex (CDC 2011). In several countries in Western Europe, including the United Kingdom, heterosexual contact is the most frequent cause of newly diagnosed infections. In 2010, the number of people living with HIV in North America and Western and Central Europe was estimated to be 2.2 million. The diversity of the AIDS epidemic in Asia is even greater than in Africa. Half of the total world's population lives in Asia, therefore even small differences in the infection may result in huge increase in the absolute number of people infected. The total number of people living with HIV in Asia is thought to be nearly 4.8 million. (UNAIDS 2011). Around half (2.4 million) of these population belongs to India followed by China (740,000), Thailand (530,000) and Myanmar (240,000) (UNAIDS, 2010).

In 1986, the first known case of HIV was diagnosed by Dr. Suniti Solmon amongst the female sex workers in Chennai. Later that year, sex workers began to show signs of this deadly disease (Sternberg, 2005). At that time, foreigners were traveling in and out of the country. It is thought that these foreigners were the ones responsible for the first infections (Simoes,
By 1987, about 135 more cases came to light. Among these 14 had already progressed to AIDS. (Kakar, 2011). Prevalence of the disease among the high risk groups reached above 5% by 1990. As per UNDP's 2010 report, India had 2.39 million people living with HIV at the end of 2009, higher than 2.27 million in 2008. Adult prevalence also rose from 0.29% in 2008 to 0.31% in 2009. (Wikipedia, 2010)

Concurrently in 1986, HIV started as epidemic in India, attacking sex workers in Chennai, Tamil Nadu. Setting up of HIV screening centers was the first step taken by the government to screen its citizens and the blood bank. To control the spread of the virus, the India government set up the National AIDS Control Programme in 1987, to co-ordinate national responses such as blood screening and health education. In 1992, the government set up the National AIDS Control Organization (NACO) to oversee the policies for prevention and control programmes relating to HIV and AIDS and the National AIDS Control Programme (NACP) for HIV prevention. The State AIDS Control Societies (SACS) was set up in 25 states and 7 union territories to improve blood safety measures. In 1999, the second phase of the National AIDS Control Programme (NACP II) was introduced to decrease the risk of HIV by promoting behavioural change. The prevention of mother-to-child transmission programme (PMTCT) and the provision of antiretroviral treatment were materialized. In 2007, the third phase of the National AIDS Control Programme (NACP III) targeted
the high-risk groups, conducted outreach programmes, amongst others. It also decentralized the effort to local levels and non-governmental organizations (NGOs) to provide welfare services to the affected. (AVERT, 2011)

According to Assam State AIDS Control Society, the first HIV positive case in Assam was reported in September, 1990. Till 1\textsuperscript{st} January 2012, altogether 6304 HIV positive cases with positivity rate of 6.28 per thousand were found to be affected. However the recently published technical report on India HIV estimate by NACO has reported on estimated 14,244 HIV positive cases in Assam. (ASACS, 2012). It was also reported that Assam is still a low prevalence State. But it is considered as a highly vulnerable State because of its location, socio-economic and cultural factors to spread the disease. Assam is the gateway to all the other north-eastern States and Guwahati acts as a major transit point for such people who are mobile and form the floating population. The geographic position of the State, in particular, predisposes vulnerability to people who cater this floating population. Also, it borders the high prevalence States of Manipur and Nagaland. Moreover, high-prevalence of sexually transmitted infection (STI), stigma and social discrimination, inequity, high prevalence of risky sexual behaviour among young people, existence of mobile and hidden nature of female sex workers, drug abuse, injecting drug, illegal drug trafficking, large-scale migration for seeking employment avenues, etc.
make the State highly vulnerable to HIV/AIDS. (ASACS, 2010). The disease can be transmitted from a person to another person through the exchange of body fluids such as blood, semen, breast milk and vaginal secretions. Among these, sexual contact is the most common way to spread HIV/AIDS. It can also be transmitted by sharing needles while injecting drugs, or during childbirth and breastfeeding. As HIV/AIDS reproduces, it damages the body's immune system and the body becomes susceptible to illness and infection. There is no known cure for HIV infection (Mary, 2011) and vaccines are also not available (Robert, 2012), which results in increased evidence of fear of disclosure, stigma, and discrimination. These brought significant impact upon people and families living with HIV/AIDS as well as their care providers (Becky, et al. 2008). Health workers are also facing inherent job stresses in caring such patients with physical and emotional symptoms, accompanying with negative impact on their families. The consequences are reduced productivity, job dissatisfaction, absenteeism, and high turnover in service resulting in staff shortages and reduced quality patient care (Sheila, 2006). Besides the challenges involved in providing care to people who are usually not feeling well, nurses also have to come in terms with human suffering like the death of patients. To take care of such people they must be equipped with the knowledge and skills to understand stigma and help themselves and their patients to work through
these negative experiences. Stigma and discrimination affects clients’ ability to participate in health care (Elsje, 2004).

The aim of this study was to assess knowledge, attitude and practice of nurses on HIV/AIDS working in government health institutions of lower Assam. If we look at the shocking figures of world scenario depicted above, we are compelled to think about our continent, country and our own state, as the causative virus spreads through body fluid contamination from an infected person to a healthy person. This is true that health workers have to take care of different ailing people, knowingly or unknowingly about the nature of the disease or infection they are suffering from. By doing this, they themselves may get infected with the same life threatening diseases at their work place and can spread those to other person without their knowledge. Moreover, when a patient is known to them as HIV positive fear might be there, and out of fear they can stigmatize their patients. In such cases question may arise on patient’s legal and moral right to get equal and proper care like the other patients. Besides, the workers may not have proper knowledge about the nature and spread of disease; attitude of the workers may not be proper as there is a lack of knowledge; or if knowledge and attitude is proper, health workforce may not have proper practice and then problem will arise in caring the patients. So, knowledge and attitude of this population is very important to adopt various protective measures meant for prevention of HIV/AIDS. It is equally important for
them to offer mental support to the people living with HIV/AIDS (PLHA) in their respective community and to fight with stigma related to the disease. Therefore, the researcher has chosen this problem to find out the current situation prevailing in lower Assam related to knowledge attitude and practice of the health workers in this region.

1.1 **NEED FOR STUDY:**

During their professional experience, health care workers who care for individuals with HIV/AIDS need to be qualified to deal with the specific requirements of the syndrome, which demands technical and scientific knowledge and understanding of the ties established between the clinical team and patients with HIV/AIDS. An implicit concern during daily practice by health care workers is the possibility of getting infected with pathogens through accidental exposure to blood and other body fluid (Maria, *et al.* 2005). This is true that, HIV/AIDS epidemic has posed serious threat and tremendous challenges to the health systems of developing countries like ours. Because, HIV/AIDS increases overall health expenditures for both medical care and social support at the time that it claims life of doctors, nurses and other health care providers and this will affect the public health services. Health workers are vulnerable to the same route of infection as the general public. The morale of health professionals may also be affected because of demanding and stressful working conditions of the staff involved. High level of stress may lead to
greater absenteeism and sometimes they may refuse to take care of such patients. In some cases the quality of services may also be affected by attitude of health workers towards HIV/AIDS patients for fear of contracting the disease and psychological stress involved in treating the AIDS patients which may lead to decline in the quality of service provided. (World Bank, 1999).

Keeping in mind all such issues the researcher felt the need of this study and had made an attempt to find out whether nurses are prepared to care their patients knowingly or unknowingly about the patient’s HIV positive status; whether they have adequate knowledge about the problem and if yes how to handle it; and what attitude they posses towards caring of their patients. In this study attempts were also made to assess the working of the health care providers in their field. Plenty of literatures are available on HIV/AIDS, but there is paucity of literature regarding studies on health workers’ knowledge, attitude and practice. It is expected that this study will throw considerable light upon this field, and will help to adopt appropriate measures for the benefit of the patients as well as of the health care providers.

1.2. TITLE OF THE STUDY

A study on knowledge, Attitude and Practice of Nurses on HIV/AIDS working in Government Health Institutions of Lower Assam.
1.3. AIM

To explore knowledge attitude and practice of nurses who are working in government hospitals of Lower Assam.

1.4. OBJECTIVES

- To assess the knowledge of nurses on HIV/AIDS.
- To assess the attitude of nurses towards HIV/AIDS cases.
- Assessment of nurse’s practice in the working field to prevent spread of HIV infection and caring of their patients.
- To identify the factors that affect knowledge, attitude and practice of nurses on HIV/AIDS.
- To sort out district wise ranking of nurse’s knowledge, attitude and practice of nurses of Lower Assam on HIV/AIDS.

1.5. OPERATIONAL DEFINITIONS

Knowledge:

Nurse’s knowledge on various aspects of HIV/AIDS problems that health workers have to face or should know which was assessed from the health workers during the study period.

Attitude: Nurse’s feeling arising out of thought, emotion and behaviour associated with HIV/AIDS, HIV positive person, AIDS patients as reported by the nurses.
Practice: The way how the nurses are working in their field to prevent spread of infection, support their clients and protects a person’s right to keep his confidentiality for his HIV positive status, as the subjects of the current study reported as they performed at their working field.

Lower Assam:

Twelve districts of Assam as per the office of the Lower Assam commissioner, consisting, Barpeta, Baska, Bongaigaon, Chirang, Darang, Dhuburi, Goalpara, Kamrup metro, Kamrup, Kokrajhar, Nalbari and Udalguri districts.

Nurses: nurses involved directly with delivery of health care service to public.

Educational qualification of Nurses:

ANM: Auxiliary Nurse Midwife

GNM: General Nursing and Midwifery

B.Sc Nurses: Bachelor of Science (Nursing)

M.Sc nurses: Master of Science (Nursing)

Designation of nurses:

ANM (Auxiliary nurse midwives): a nurse midwife who works as multipurpose health worker at the grass root level in health care delivery system.
Staff nurse: a person who works in a hospital taking care of the ill and injured and whose rank is below that of a sister in a hospital.

LHV (Lady Health Visitor): a nurse and midwife who assumes responsibility to assist in implementation of Multipurpose Health Programme in the Block area in addition to his/her assistance in the curative aspect of the primary health centre.

Ward sister: a nurse who works as a nursing in charge of a ward in a hospital.

**Use of Medias:** Media used by the respondents as leisure time activity and also a source to acquire information on HIV/AIDS consciously or unconsciously along with entertainment

**Watching TV:**

Watching television is found to have powerful impact on the peoples’ knowledge, attitude and practice of its viewer.

**Always, Sometime, Never watched television:**

The way; how often the health worker used this media and gets information of the disease. This was reported by the nurses felt at the time of their response.

**Listening to Radio:**

Radio possibly will certainly shapes community outlook. The participants of the study listens radio for amusement as well as for gaining information of the
problem and develop their outlook and unknowingly or knowingly impact on the attitude and practice at their working field.

**Listening radio; Always, Sometime, Never:** As the nurses felt how they use this electronic media and reported.

**Reading health related books/journals:**

Books and journals are excellent sources of knowledge to the nurses who prefer self education even after completion of formal nursing education and to update health related knowledge.

**Reading health related books/journals; Always, Sometime, Never:**

As the nurses felt how often they use these print media to acquire knowledge on health related matter (possibly on HIV/AIDS) and reported on the question asked to them.
Conceptual framework the study

Figure 1.1: Conceptual framework of the study
Conceptual framework of relationship between nurse knowledge attitude and practice with HIV/AIDS

The conceptual framework of this study is depicted in Fig 1. Here, independent variables are age, gender, religion, marital status, general education, nursing education, HIV/AIDS related training, designation, working institutions, working experience, watching to TV, listening to radios and reading health related books and Journals. Dependent variables are knowledge on HIV/AIDS, attitudes towards HIV/AIDS cases, and the practice of the nurses in their working field. The independent variables have influence on knowledge attitude and practice of nurses in their working field. Again all three dependent variables are correlated with each other and can be reinforced by time to time HIV/AIDS related training workshops conducted for them. The training activities will be fruitful if there are facilities for resources for maintaining universal precaution, good working environment and effective monitoring system to evaluate nurses in their working field. Then only it will be possible to expect the desired preventive, rehabilitative and palliative care for the patients with HIV/AIDS in Lower Assam.