CHAPTER – V

DISCUSSION

The result of the present study has provided substantial information regarding the socio-demographic characteristics of the nurses of Lower Assam. It has uncovered the picture of their working environment related to their knowledge, attitude and practice amidst the current scenario of the HIV/AIDS problem. This study includes all categories of government health institutions of lower Assam, from sub-centers to medical colleges to give a broad coverage with twelve districts of lower Assam.

Socio-demographic factors have long been known to have an important contribution to the health of the population and the health outcomes. Assessment of these factors in this research study has revealed a clear picture about the respondents’ personal characteristics and how these factors affect their knowledge, attitude and practice related to the current problem. The study revealed the fact that most of the participants of the study group were from Hindu community and next to them were from Muslim community, followed by Christian and members of other religious community. It was felt that people of Hindu community started to accept this profession as their livelihood. The members of other communities also
accepted this career as a mainstream profession with the advancement in education in the society.

The caste factor of the respondents was found to have very highly significant impact (P<.000) on knowledge; and nurses from general caste showed more knowledge of the disease than the other castes. Grihini (2007-2008) discovered that the performance of general caste is better than OBC and ST/SC in both reception and production.

Religion also showed to have significant impact on knowledge of the subjects. Nurses from Muslim community showed higher scoring in knowledge than the nurses from other communities (P=0.001). It may be due to the social restriction imposed on women in this community, negatively enforced them to acquire knowledge on health related matters, and to do more hard work.

Although it has been found that General educations of the nurses were ranged from HSCLC to post graduation level, the number of HSCLC passed nurses comprises the biggest group. The respondents having nursing as educational background ranged from auxiliary nursing to master nursing course. Auxiliary nursing professionals represented in a large number, whereas only two M.Sc nurses were encountered in the entire study. Since minimum educational qualification for entrance into the female health workers course (ANM) is matriculation, the numbers of ANMs were more in this study. The analysis of nursing educational background revealed that,
there is no significant difference of mean score of knowledge among different categories of respondents. Nurses having B.sc degree scored highest with mean scores of 40.45%. Mehrdad et al. (2006) revealed that nurses holding a bachelor of science in nursing or a master of science in nursing (MSN) had a significantly higher level of knowledge than the auxiliary nurses. Like nursing education, amongst the general education categories graduate nurses scored highest (40%) in comparison to High school leaving certificate passed nurses (40%). Fatuma et al. (2012) also reported that university students are relatively in a better position at the educational level.

No significant differences in knowledge was found among the different age groups, but the respondents of age group from 51 years and above age scored more in knowledge than the others. The rationale behind this is that during the service period, they had enough opportunity to learn from different situation at their work field. Moreover, the respondent of age group below 30 years gets more leisure time to involve them to acquire knowledge. This huge nursing manpower group in this study, had work experience ranging from 1 to 20 years, and this was the most active period in one’s service life. In this period one can acquire knowledge, grow healthy attitude and develop skills very easily if they are encouraged.

Knowledge applies to facts or ideas acquired by study, investigation, observation, or experience. (Merriam webstar, 2011) The result of the
present study showed that the participants had mixed response on knowledge about HIV/AIDS. However, considering the nursing practice nurses as target populace involved in caring patient, their knowledge was found to be inaccurate and insufficient as health professionals. Surprisingly, nearly more than half of the respondents did not know the full form of HIV; and 65% could not answer the full form of AIDS. In contrast, Eman, et al. (2011) found that, 75.3% nurses from Egypt could answer correctly about the full form of HIV and AIDS. Dijkstra et al. (2007) reported 89% correct response in sub Saharan Africa. It was observed that only 26% of the respondents have an idea about mother-child transmission of the deadly disease. Yayeh et al. (2003) felt the need of improvement of the knowledge on mother to child transmission. The health workers needs awareness workshop to educate all expected parent to go for voluntary testing and counseling to know the HIV status prior to child-birth, so that they can take all precautionary measures to protect the baby from the viral infection.

Marital status of the participants did not show any significant influence on the mean scores of knowledge of the participants as (P=.667), but married participants showed more knowledge than unmarried ones. Amit et al. (2009) revealed that marital Status is an important factor for Knowledge related to HIV/AIDS.
The present study also revealed that the nurses of lower Assam showed poor knowledge regarding the precautionary measures related to prevention of HIV infection. Only 22% subjects had knowledge on necessary measure to keep one healthy after getting HIV infection, and only 14% could correctly answer on prevention of HIV transmission. The reason behind this may be due to non-inclusion of HIV/AIDS related subject matter in their academic curriculum; and adequate HIV/AIDS related trainings were not provided to them. Omisakin (2001), Aisien et al (2005), and Christina (2012) also reported knowledge deficit regarding HIV/AIDS among the nurses in another similar study.

Among the respondents only 50 percent were found to have HIV and AIDS related training, or attended HIV/AIDS related workshop, which is not a good trend for our health care system. Since this disease virus spreads silently, and because of its longer incubation period the victims can infect many other innocent people without knowing their HIV positive status. It is, therefore important that the health workers must be trained properly with sufficient knowledge.

The respondents’ leisure time activities and informal ways of acquiring knowledge revealed that majority nurses infrequently viewed television, and listened to radio occasionally. Only 16% reported that they read health related journals very often, which is their only source of gathering information. Mohammad et al. (2012) also reported that main sources of
information related to HIV/AIDS are radio, television, newspapers and magazines for general public and medical stuff. Azodo et al. (2007) found the electronic media as the leading source of information for dental nursing students. The effectiveness of mass media for generating HIV/AIDS-related information was also supported by LiLi et al. (2009). It was well accepted that media has tremendous impact on knowledge, attitude and practice of the viewers. Only the print media was credited for creating favourable attitude towards HIV/AIDS. Anusha (2008) mentioned that the print media which include newspapers, periodicals, newsletters and other channels are relied upon by the people as credible source of information, education and entertainment. Rayuso (2012) described that media influences public opinion.

In some other aspects the nurses responded well. More than half of the subjects were aware about incubation period of HIV. Nearly 45% participants had knowledge on opportunistic infection whereas a large group was aware about high risk behavior related to HIV transmission. Majority of the respondents of this research project were found to be aware about the modes of HIV transmission, a large group of them (41%) could answer properly regarding blood transfusion. Almost half of the participants had knowledge on sign and symptoms of HIV and knew how to manage needle prick injury. Similar observations were also reported by Atulomah et al. (2002.) in their study related to knowledge about
transmission of HIV/AIDS. Delobelle et al. (2009) also supported this finding. This may be due to the step taken from the government to sensitize the health workers on universal precaution to prevent spread of infection.

It was also revealed that, 50% of the nurses had knowledge on antiretroviral agent. Now with the emergence of antiretroviral therapy, it has become possible to increase the life span of a person infected by this virus. A nurse has to administer these drugs as well as to impart health education to their clients; therefore all the nurses need to be aware about antiretroviral agents. Kravcik et al. (1998) reported dramatic reductions in plasma HIV RNA levels are possible with current antiretroviral regimens. Other study also showed close association to this report (Wei et al .2004; Chizoma 2007).

It was observed that working institution had some influence on knowledge of the health workers (P=.038). The nurses who worked at PHC scored more than other institutions. The reason behind this may be the holding of monthly meetings in each PHC to discuss the problems faced in the locality, where all nurses participate along with the other health workers. Designation of the nurses showed significant difference on the knowledge of the respondents (P=.002) in this study and lady health visitors were reported to have highest level of knowledge than other nurses. The reason behind the fact is that lady health visitors are getting more opportunity to attend various training courses. They are also involved in in-service
training activity in their institutions and acquire more information than other nurses.

Attitude is an “a psychological tendency that is expressed by evaluating a particular entity with some degree of favour or disfavour” (Alice and Shelly, 2007). For the past several years, diverse and often confused concepts of stigma have been invoked in discussions on AIDS. Many have argued its role in decreasing interest in HIV care (Arachu, 2005), It was observed by almost all researchers that stigma and discrimination are a daily reality for people living with HIV and their families. Stigma is prevalent in all countries experiencing HIV epidemics. It is found within families in communities and institutions, such as health care facilities. Keeping confidentiality about HIV positive status of the patient was reported by a large number of people in the present study. Confidentiality is mandatory for the people who suffer from this disease, and this is the way one can protect the patient from stigmatization. Recent law also supports secrecy of HIV positive status of the patient. Opposing to this may result in violation of confidentiality to HIV/AIDS victim as was reported by Charles, (2006). The findings of the study also revealed that stigma is not a serious concern among the health care workers. Majority agreed that, HIV is not the result of one’s past life sin. Similar response of health care workers was also reported by Teamur et al. (2009) in a similar study. They have enough sympathy to the patients and they hesitate to
disclose the report of HIV positive status to their patient for the first time. A good number of the participants have expressed their willingness to give mental support while revealing of HIV positive status. This may be due to the fact that they did not know how to deal with the emotional situation that may arise, as they lack the counseling skill to deal with such situation. Counseling helps people to accept and cope with the knowledge of being HIV-positive, and furthermore encourages acceptance from families and communities (UNAIDS, 1997).

Majority of the respondents have expressed their willingness to take care of HIV positive patients. Maswanya et al. (1999) and Mariam et al. (2004) also reported positive attitudes of the health care workers towards the patients with HIV/AIDS despite the fear of contagion. This is encouraging to know that nurses of Lower Assam are prepared to take care of the patient happily, but they need adequate supply of protection device for themselves from contagion of virus to render efficient services to the people without the fear of being infected. On the contrary 75% prefers to take preventive measures for HIV infections as they believed that prevention is always better than cure in all health care setting. Not only for HIV/AIDS but for all most of disease prevention saves time, money, energy and even lives of some one.

The most interesting finding of this study was the fact that most of the healthcare providers showed positive attitudes towards patients with HIV.
A good number (72%) informed that they will be happy to educate patients for protection of opportunistic infection whenever it is possible. Study conducted by Sadah et al. (2006) and Christa et al. (2012) also reported similar attitude of the health workers towards the HIV/AIDS patients. Chen et al. (2004) emphasized the need for educating the healthcare workers with the appropriate knowledge of HIV/AIDS. On the other hand, a large number of health workers expressed their negative attitude towards the person who has multiple sex partners, as the possibility of spreading the infection has increased by this way. Shitaye et al. (2004) opined that staying with only one uninfected faithful partner protects people from HIV infection. Lilil et al. (2011) also revealed that Chinese nurses showed little sympathy to patients getting contaminated with HIV by sexual promiscuity. This difference in attitude might be culture-oriented or might be rooted in the society.

Another interesting point came to light in this study was that a set of nurses (58%) believed that a woman from this locality does not have the courage to argument for safer sex. This way they became prone to infection. Khondom (2004) mentioned that sexual decision making is always with men in India. Majority of respondents of the current study expressed that they use to educate patients, their relatives and friends about safer sex as a preventive measure for HIV infection. To impart health education is no
doubt appreciable, but unfortunately most of the nurses are not trained with counseling skill to help their patients and provide adequate support.

Some respondents expressed their empathy towards the HIV infected mothers too. The nurses of lower Assam are sensitive towards the HIV infected mother; they may be encouraged to educate the mothers and the public regarding the process of transmission from mother to child, so that they can raise their voice for safer sex. Another study revealed that 62.4% Ethiopian mothers had favorable attitude towards voluntary counseling and testing (Chernet, 2005). About 94% respondents of the study group used to advise patients to take balanced diet, to do regular exercise, take rest and sleep for better health and 80% are in favour of imparting education to the patients and their relatives on precautionary measures to check opportunistic infections. WHO, (2012) also emphasized the need for providing good nutrition to the patients for maintaining better health.

In the current study, majority of the respondents strongly expressed their desire to undergo screening test for their HIV status. They feel that if they themselves get infected by the disease the possibility of spreading the disease will be more, but rest of the nurses showed negative attitude towards the problem. The main reason stated was the fear of being infected while caring. Another group of health care providers had declared that even thinking about caring of HIV-infected patients made them worried. Similar attitude of caring HIV infected patients were also reported in other such
studies (Bakari 2000, Earnestina 2012; Mogosha, 2009; Tenibiaje, 2010; Yahaya, et al., 2010), established that the subjects were ill-informed, negative and discriminatory in their attitudes towards people with HIV/AIDS. Considerable misconceptions and prejudices about people having HIV also prevailed in the society as well as among the respondents. The healthcare workers are prone to get contaminated through the same route of infection as other people. In addition to that they are receptive to the infection through other sources while working with their patients.

It was also examined how the nurses are functioning at their work place. About 83% of the study group reported that they take precautionary measures very often to prevent the spread of infection at their working field. Miriam et al, (2004) also reported similar findings in her study whereas another study conducted by Hesse (2006) was not in agreement with the current findings.

Another aspect of the study was concerned with the practice of the health workers at their workplace. This study revealed that, 63% of respondents are sincere in caring their patients and committed to their duties. Prevalence of HIV/AIDS is still low in Assam in comparison to other states. The health workers of this region had never witnessed the dreaded consequences of the disease to be scared of it. In contrast to this in
USAID (2007) reported active denial of services to HIV positive patients by the African healthcare workers.

There should be a heightened understanding of transmission of blood borne diseases among the healthcare workers including surgeons, physicians and nurses. It is important for them to adhere to standard precautions to prevent exposure to infections. In this study 94% reported taking care of hospital wastes like syringe, needles, bandages and other things and dispose them safely. Most of the nurses expressed their feelings verbally that the all healthcare providers should be trained about safe disposal of hospital wastes. This is true that health-care services inevitably create waste that may itself be hazardous to health, so all people involved in health care setting should dispose hospital waste properly to prevent spread of infection. WHO (2007) also recommended safe disposal of waste for the prevention of the transmission through blood. They also expressed their view that staffs and healthcare providers should be notified when a patient has HIV/AIDS infection. One reason for this might be that if they are aware of HIV infection of their patients, they may apply better protecting measures to protect themselves from getting infected. These results are in close consortium with the findings of another study conducted by Chen et al., (2005).

The healthcare workers are normally exposed to blood in direct way and its products and needle-prick injuries while dealing with patients. A large
number of respondents (about 95%) informed that they take all precautionary measures for needle prick or any cut injury while doing any procedure. It was also found that most of them never reported the incident to a doctor to get post-exposure treatment, because they were not aware of the importance of the post-exposure prophylaxis. Awareness about needle prick injury and its remedial measures is now an essential part of health care (Kumar et al. 2002).

It was also found in the current study that working institutions have tremendous influence on the practice of the workers. For example, the health workers working at medical college hospitals reported to practise in a better way than that of other institutions (Table:36; Figure: 35). The nurses of medical college are well informed about the precautionary measures from different sources and most of the patients are aware about their rights; which forces them to be more careful in their practice. Moreover, they are guided by medical practitioners and their seniors who are already involved in taking care of patients having HIV/AIDS, and its prevention-related activities in the state.

While correlation was examined within knowledge attitude and practice, it was found to be significant (P<0.01). Yinglan et al. (2008) also reported significant correlation in between knowledge , attitude and practice (P<0.05) is in close consortium with the present study. Significant positive correlation between knowledge and attitude was also established in the
current study. Chizoma et al. (2007); Peter et al. (2009) and Datta, (1997)
found highly significant positive correlation between knowledge with
attitude. No significant relation between knowledge and practice could be
established from the results of this study. Mehrdad et al. ( 2007) also
revealed similar association between these two aspects in his study.

Although work experience did not show any significant differences on the
knowledge of the respondents; junior nurses exhibited better performance
at the knowledge level. Younger people are enthusiastic to learn new things
and they are able to receive HIV/AIDS knowledge from their training
which was not possible in earlier years. Gina et al. (2008) mentioned that
prior experience most likely to have a positive effect in a new context.

It was also revealed from the analysis that in nursing educational
background had significant influence on the attitude towards HIV/AIDS as
significance level was found to be very high (p=0.000).The GNM
background staff showed more positive attitude than the other groups.
The nurses who did their post graduation were observed to be more
positive in their outlook towards patients having HIV/AIDS. Carolyn
(2008) revealed that nurses having master degree were doing better than
the other nursing discipline. Shapiro (1989) found that Doctors with the
least knowledge about HIV and AIDS showed the most negative attitude
towards the illness.
Discussion

The result of the analysis revealed that age factor is also an important feature that influences the attitude of nurses towards the dreaded disease. The younger nurses showed more positive attitude than the other respondents. The reason behind this may be, people are more enthusiastic at younger age and want to do something good than other period of life. They want to make change, learn new things, like to be praised by other; so they have more positive attitude. This study also revealed that nurses from most senior group showed more positive scoring, and it showed significant difference with other groups (Table 27 and figure 26). Gulifeiya’s (2008) finding support that age factor is related to attitude of the employees.

Religion also acts as an important driving force on attitude of nurses towards this endemic. The analysis says that significant differences were observed between the respondents of different religion (P =0.50). The Muslim nurses scored highest rank than participants of other religion. They showed more knowledge and also have positive attitude towards the problem. The people from this community have less stigmatizing attitude toward this burning problem, as they do not believe in something like past life karma. Clarence (2004) supported the study by revealing that traditional practice has influenced on believe of a particular community.

The nature of working institution like sub-centre, state dispensary, mini primary health centre, primary health centre, community health center, civil hospital and medical college hospital set up showed significant
differences on the attitude of the responders. The nursing staffs of the community health centre, primary health centre and civil hospitals expressed reasonably good attitude than other institutions through their scoring. At the community health centre cohesiveness among all staff was observed, which encouraged them to have better attitude than other health institutions. Another reason for this may be lesser burnout at the workplace and recognition of service rendered by them. Nower’s (2009) finding supports the result of this study.

Designations of nurses were also found to influence the attitude towards HIV/AIDS problem. Significant difference was observed among the attitudes of the respondents (P=.002) from different setting. The mean scored by the nurses from hospital setting were more than the nurses who worked in community care setting and showed more favourable attitude towards the problem. The reason behind this may be the nurses who work in hospital settings are dealing with such patients very often and they are more oriented with post exposure prophylaxis and other preventive measure to protect themselves. Elsje (2004) studied the challenges posed by HIV/AIDS to nurses in their work environment and reported similar findings.

The HIV/AIDS training and its outcome were found to be very highly significant with (P=.000), but negatively. A highly significant difference was observed on the influence of HIV/AIDS related training and
workshops attended by the responders. The nurses who did not attend such training or workshop reported to do better practice than the other group. (Table 35, Figure 34). This was also observed that HIV/AIDS trainings could not show any significant influence on the three major aspects of this study i.e. knowledge, attitude and practice of the nursing stuff, which is a serious matter. Mwangi et al. (2011) supports this finding. There may be some extraneous factor behind this situation, but finding out the cause is very important for future training activities. Peter et.al (2009) felt the need for accelerated HIV/AIDS training for improvement of nursing practice.

It was found that work experience of nurses have a statistically significant difference on the practice of nurses. The level of significance was found to be 0.012 which was lesser than expected P value of 0.05. The senior nurses in this study reported for doing better practice than other groups. (Table: 37 Figure: 36). Airi (2011) expressed that experience is a part of professional competence.

The correlation was examined within knowledge; attitude and practice parameter of total scoring from the finding of the study is presented below (Fig.47).

The findings of the correlation was found to be in close consortium with the findings of Yinglan, et al.(2008), Chizoma, et al. (2007), Peter, et al. (2009), Mehrdad, et al. (2007) and Datta and Bondopodhay (1997).
The above figure shows the correlation of knowledge, attitude and practice of the current study.

The above figure shows that the correlation between knowledge with attitude was found to be significant, and attitude with practice was established as highly significant in this study. Jonathan et al. (2010) supports the current findings.

The findings of the current study have revealed significant influence of knowledge, attitude and practice of the nurses on the HIV/AIDS related problems. This was found that the knowledge of the participants is mostly influenced by their religion, caste, designation, and the working institutions where they are currently working. The attitude of the population were predisposed by the factors like nursing educational background, general
educational background, age, religion, designation, working institutions, and work experience. Lastly, the practices of the nurses were generally found to be determined by the age, and their professional experience.

The district wise ranking of knowledge, attitude, and practice of Lower Assam nurses as per their scoring were as follows Knowledge level- Barpeta was on the first rank, Dhuburi was on the second rank, Kamrup Rural was on the third rank. The Attitude level was observed as follows- Nalbari was on the first, Baska was on the second rank, Kamrup Metro was on the third position and lastly, the Practice level- Baska was on the first rank, Nalbari and Chirang is on the second and third rank.

The Lower Assam is a big area comprising twelve districts. This is a connecting area of North Eastern Region with the entire country. On the other hand, being closer to the neighboring countries like Bangladesh and Bhutan, this area is more prone for HIV transmission. The health sector of these districts needs utmost importance on the matter of prevention of the disease. There must be continuous stimulation of health workers to work in this field through trainings, supervision, and providing available supply of precautionary devices for body fluid contamination. Moreover, mass medias should be utilized to make the public aware of the preventive measures for both at the community level and safe hospital practices; so that health workers are forced to follow the universal precaution for prevention of HIV/AIDS at their working field.