CHAPTER - III
MATERIALS AND METHODS

This chapter deals with the research approach, research design, setting of the study, sampling technique, sample size, description of the tools, data collection procedure and plan.

**Title of the study**

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

**Aim**

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

**Objectives:**

I. To assess the knowledge of nurses on HIV/AIDS.

II. To assess the attitude of nurses towards HIV/AIDS cases.

III. Assessment of nurse’s practice in the working field to prevent spread of HIV infection and caring of their patients.

IV. To identify the factors that affect knowledge attitude and practice of nurses on HIV/AIDS.

V. To sort out district wise ranking of nurse’s knowledge attitude and practice of nurses of Lower Assam on HIV/AIDS.
3.1. Research approach

Survey was the primary approach of research selected for the study of the chosen subject as it proves to be the most convenient method for collection of wide range of data covering a large area.

3.2. Research design:

A cross sectional descriptive study was conducted using quantitative method in Lower Assam districts.

3.3. Population:

Population of the study comprises of nurses working under government sector in Lower Assam.

3.4. Sample and sampling technique:

Sampling technique was purposive one for the entire study. Samples were collected from the Nurses working at different health institutions of government health sector from twelve districts of Lower Assam, In Lower Assam, there were 1841 sub centers, 129 state dispensaries, 165 mini primary health centers, 58primary health centers, 46 community health centers, 8 civil hospitals, medical college hospital 1. This information was received from the office of the Director, National Rural Health Mission, Assam, Khanapara, Guwahati, Assam; at the time of planning of data collection. It was found that the total number of GNM is 16,657 and ANM is 12,082 in number as per National Health Profile (2007) including
both government and non-government sector all over Assam. Although there was no exact information of the total number of nursing population available currently for this area, 700 samples were collected from different categories of nurses from Lower Assam. Sample collected from 300 sub-centers (321 nurses), 23 state dispensaries (23 nurses), and 24 mini primary health centers (24 nurses), 13 primary health centers (89 nurses), 12 community health centers (52 nurses), 6 civil hospitals (172 nurses) and one medical college hospital (19 nurses).

3.4.1. Selection of entire sample:

The exact number of the target population of the study area was not available from the respective state health organization. Therefore, samples were selected according to the availability of the respondent on the spot. From them 10 percent and above sample were collected. Since there is only one medical college hospital in Lower Assam area at the time of data collection, 10 percent of samples were collected from the different departments of the said college hospital available on the spot.

3.4.2. Selection of different levels of health institutions:

Above 10 percent of the total institutions were selected from all level of health institutions.
3.4.3. Selection of study subjects:

The numbers of study subjects were selected on the basis of availability of the subject present at the place at the time of data collection. Among them 10 percent of subject were selected.

3.4.4. Sample size:

Seven hundred nurses from Lower Assam.

3.5. Inclusion criteria of sample:

- The nurses directly involved in patient care service.
- The nurses directly related to health care service to public.

3.6. Development of tool:

Tools were developed by the researcher; pre-test study was conducted in a multi-specialty hospital before main study and respondents were not included in the main study.

3.7. Description of the tool:

3.7.1. Questionnaire 1:

This was a 10 item questionnaire to find out the socio-demographic condition of the respondents; and they had to answer extra 3 items that indicated their informal sources of information to acquire knowledge on health related field. The respondent had to tick on and write down about his/her personal information on the form.
3.7.2. Questionnaire 2:

A knowledge assessment questionnaire, with multiple choice questions (14 in numbers). This was used to find out knowledge of respondents on spread of disease, clinical signs and symptoms, treatment modalities etc. Four answers were given for each question out of which the respondent had to select the correct answer; and for each correct answer 4(four) points were given to calculate the point scored by the responder during the time of analysis of data.

3.7.3. Questionnaire 3:

This was an attitude assessment questionnaire with four point Likert type of scale (11 in numbers) of questions to assess respondent’s attitude towards HIV/AIDS. It was a four item measurement scale where the subject had to respond as strongly agree, agree, not sure, and do not agree and points were given as 4 (four) points for strongly agree, 3(three)points for agree, 2(two)points for not sure and 1(one) point for cannot agree for positive question’s answers. Negative question answers were considered just opposite to this to the previous order to prevent biasness.

3.7.4. Questionnaire 4:

This form was an assessment questionnaire with (10 number) of questions to assess how the nurses are working in their field to prevent spread of this infection, and how they support their client to fight with the
problem. Here the respondent had to tick on four item measurement scale like -always, sometime, rarely, never. Like questionnaire 3, points was allotted like this 4 point for Very often, 3 point for often, 2 for occasionally and 1 for never.

3.8. Validity of the tools:

The instrument was presented to other experts in this field of study and was modified where necessary. Pre-testing of the tool was done in a multi specialty hospital, with similar types of sample, before starting the main study. Total number of 150 sample have been collected and Guttman split half method was applied to check the reliability of the tool and score found is .665 indicating acceptable reliability of the tool.

3.9. Method of data collection:

The list of institutions was collected first, and then Permission request letter was obtained from the guide of the study so as to allow the researcher to collect data from the respective institutions. Prior to the visit to each of the institutions, necessary permission from the head of the institution was taken and the researcher communicated with them before data collection to find out which day will be most favourable to get more respondents at a time, like; monthly meeting day of Primary Health Centers And through direct approach to the respondents. Data from medical college hospitals, civil hospitals were done by approaching nurses directly by personal contact at hospitals, and visiting their residence and
hostels after getting permission from the respective authorities. The subjects were instructed to fill up the questionnaires for this study and filled up forms were collected.

3.10. Ethical issues:

Informed consents were taken from respective institutions and the participants after explanation of the purpose of the study and after ensuring confidentiality.

3.11. Analysis and interpretation of data:

Collected data were analyzed using SPSS software. Frequency distribution were used to find out the occurrence of the Demographic Variables, service related information, use of Medias and knowledge, attitude and practice scores by the studied population, Pearson correlation was used to find out the relationship among knowledge, attitude and practice of nurses. One-way analysis of variance was used to compare the mean values for independent variables between the two groups and more. The t-test, one-way Analysis of Variance (ANOVA) and a form of regression analysis are mathematically equivalent (William, 2006)) so that the researcher could try to present the analysis simply based on it.