CHAPTER III

RESEARCH METHODOLOGY

3.1 Research design

Cross-sectional study was designed to determine; the HIV prevalence, the factors associated with HIV prevalence, and the association between sociodemographic, social behavior, knowledge, and their sexual risk behavior for HIV infection of Lao migrants working periodically in Thailand.

3.2 Research area

Thirteen villages of Champorn district, Savannakhet province were selected to be the study area. Savannakhet province bordered with Vietnam and Thailand. The province had extensive experience with HIV epidemic compared to other provinces of Lao PDR. Savannakhet province has 21,774 km² of surface, about 35/km² of density and 748,651 population. In the year 2000, 1.2 percent (9,000) of them had registered to work in Thailand. Among them 4,215 or 46 percent were from Champorn district.

There were approximately, 15,005 population in the 13 villages and about 4,334 (29%) were aged 15-35 years. There was no data of how many of these aged group resident of the villages went to work in Thailand. However, during the

study period a total 413 of this age group returned from working in Thailand and were approached to participate into the study.

3.3 Inclusion criteria of participants

- The Lao migrants both males and females who have periodically worked in Thailand since 1995 until June 2000, aged 15-35 years.
- Give informed consent to participate into the study.
- Give consent to participate for the following condition:
 - The participants would be conducted a physical exam and blood drawing: 5ml for HIV testing.
 - The participants would be requested to answer questions based on their best knowledge.
 - The participants would receive remuneration for compensation and travel cost on the day of their participation.

3.4 Research instrument

3.4.1 Questionnaire design

The tool of this research was structured questionnaire developed by the researcher under a supervision of the advisor and co-advisors.

The structure of questionnaires were synthesized and adapted from previous researches such as KAP survey in Luang Prabang and Oudomxay province,

Lao PDR and PAVE/HIVNET project in Chiang Mai, Thailand. Structured questionnaire was used as a main research instrument for data collection. First draft questionnaires were prepared in English and translated later into Lao Language. After revision the questionnaire forms were sent to the Director of NCCA Bureau in Vientiane for additional correction. In addition, the questionnaires were pre-tested in outside target area by interviews with representative sample of total 12 persons. Finally the questionnaire forms were revised and developed the final copies.

3.4.1.1 Questionnaire development

The questionnaire was constructed to describe socio-demographic characteristics among the Lao migrant from Champorn district who worked periodically in Thailand and to assess their knowledge, attitude, practice and risk behavior on HIV/AIDS. The questionnaire composed of 6 parts. Each part consisted of closed-end and opened-end questions which intended to elicit information from the target group accordingly to the indicator setting. Standardized codes have also been used wherever appropriate. For instance, number 1 was allocated to all "yes" answers, number 0 to all "no" or "never" answers, and number 9 as all "unknown" answers. (see appendix)

Part I This part consisted of seventeen questions to describe the sociodemographic characteristics among Lao migrants working periodically in Thailand. Which included gender, age, marital status, education, religion, ethnicity, place of birth, place of permanent residence, relative in Thailand, and time of working in Thailand. Part II This part consisted of twenty one questions to identify the past illness of the target groups, including tuberculosis (TB), hepatitis B, diabetes, hypertension, surgical operating, STDs, history of hospital admission and history of blood transfusion and donation.

Part III This part consisted of twenty three questions and identified the risk factors acquisition among the Lao migrants including alcohol consumption, smoking cigarette, drug abuse and sexual behavior, and consistent condom use with girl friend; boy friend; spouse; CSW; and other sex partners.

Part IV This part consisted of sixteen questions to describe the knowledge and attitude about cause, epidemic, mode of transmission, treatment and prevention of HIV/AIDS.

Part V This part consisted of eight questions to identify the preventive measure of the target groups, which focused on condom use.

Part VI This part consisted of six questions to identify the sources of information on HIV/AIDS and history of HIV testing.

3.4.2 Blood test

Two techniques of blood test have been used to detect HIV status among the target groups. All blood samples firstly checked by Particle Agglutination test (SERODIA HIV Test) in the laboratory of Savannakhet provincial hospital and then confirmed by ELISA Test from the laboratory of NCLE in Vientiane Municipality.

3.5 Survey procedure

3.5.1 Training of teamwork

The training course was important step of preparation the survey. In order to make the study obtaining a correct and reliable results, it is essential for all member of the study team to understand the process of study and any bias/error that may occur during the study. In addition, the study team also needs to practice before conducting the real exercise. The training course on the guideline and method of study was conducted for 3 days at Champorn health district from 11-13 August 2000. Nine participants from provincial and district health attended the training. These included Deputy Director of Savannakhet provincial Health Department, PCCA secretariat, Head and Deputy Head of Champorn Health Office, cashier, and 4 study team members (2 males and 2 females including 1 lab-technician, 1 medical assistant, 1 nurse, and from Lao Youth Union, who are members of DCCA).

3.5.2 Survey conduction/data collection

After training, data collection was conducted for 23 days from 14 August 2000 until 5 September 2000 at the following sites: the meeting room of Champorn Health Office, Dispensary of zone Natey, Kaokad Primary School, Dispensary of zone Pay, Bak High School, Phosy Primary School, Dongnongkul village Office, and Dispensary of Kadane. There were totally 426 persons from 13 target villages who were willing to participate in this study, but 26 of them were not eligible for inclusion into the study due to their ages greater than 35 years. Before interviewing and blood drawing, the investigator had a meeting with the target

population explaining to them the purpose and procedure of the study. Every participant was received and read the consent form before signing to participate in the study. Those who are unable to read, the consent form was read for them before printing their thumb. Those who aged between 15-17 years, additional signature from their parents in the consent form is needed. They also received a green card with code number for tracking the result of their blood test. The participants were interviewed by using questionnaire form. Finally, the physical exam and blood collection (5 cc each) were carried out by the study team, after the participant was received a pretest counseling. In addition, they have also been advised to follow up the result of their blood test after one month at Champorn district hospital (Post counseling would be provided before giving the results). The blood samples have been sent to the laboratory in Savannakhet Provincial Hospital to perform rapid test (SERODIA HIV Test) before sending to central laboratory at NCLE in Vientiane for further confirmation by ELISA Test.

3.6 Data analysis

When the complete questionnaire forms obtained from the survey were cleaned and coded accordingly to different variables. All data were entered in to the computer and analyzed by using Statistical Package for the Social Science program (SPSS program). The statistical calculation used for describing and analyzing the data included frequency, proportion, and odds ratio. The level of significance for all relationship was set at 95% confidence (P value < 0.05). All results were interpreted and presented in the form of tables.