

CHAPTER III

RESEARCH METHODOLOGY

3.1 Research design

A cross-sectional descriptive study with a purposive sampling was used. Since differences in risk of HIV seropositivity and behavior can be based on where migrants were recruited, mainly factories were recruited because others are only temporary and unstable in nature. Thus, the factories were purposively selected with the advices from the Mae Sai Hospital.

3.2 Study area

Mae Sai was chosen by purposive sampling due to its high prevalence of Migrants and also includes in the Golden Triangle which is notorious for drug production, smuggling and usage. Mae Sai is located in Chiang Rai Province in the northern part of Thailand. It is also a major cross border area between Thailand and Myanmar separated by Mae Sai River.

3.3 Study population

The target population for this study was the Myanmar migrant workers who working and Living in Mae Sai, Chiang Rai Province Thailand. In Mae Sai, there are temporary or day-return migrants and living migrants. According to the different behaviors among these two types of migrants, the study was mainly focus on the migrants who were living or staying in Mae Sai. Among the 1.3 millions of registered migrant workers, about 1.08 millions, the majorities, were from Myanmar. But there were nearly 1.5 millions of people were unregistered and family members among Cambodia, Lao PDR and Myanmar according to IOM's Thailand Migration report 2011.¹³

According to the Migrants health examination for the health insurance at Mae Sai Hospital, there were nearly 2,284 from January to October 2012 but the number

can be more than that because this was only the registered number and only for health insurances schemes.

3.4 Research criteria

Inclusion criteria

The study population was composed of who had: (1) working and living in Mae Sai (registered or unregistered) aged over 18 years (2) voluntary participation in the study after being informed and (3) given their consents to be interviewed.

Exclusion criteria

The migrants who refuse to participate and those who have psychological problems.

3.5 Sampling technique

As there is a great mobility among Myanmar Migrants according to their different workplace and accommodation, they are scattered and also unregistered population also presented. Therefore, Chaing Rai province was selected for purposive sampling as there were a very few studies had been carried out in that area compared to the others area. Then, Mae Sai District was selected as it is situated in Golden triangle between Myanmar and Lao.

After that the sample 5 factories were selected purposively from the Mae Sai Hospital. In each factory, the samples were chosen according to inclusion and exclusion criteria. The interview was asked till the sample size was reached. But the sample population was not enough due to various constraints. Therefore, the construction workers had been enrolled with the help of key informants from Mae Sai Hospital. The research assistants (the volunteers, one male and one female from Mae Sai Hospital) informed and contacted about the research to the factory's owners or managers. After getting permission, the participants were invited for interview till the sample size. The interview was done during their free times such as in their lunch times, in the evening and at night, even in the holidays.

3.6 Sample and sample size

According the Cochran formula with the p value of 50% was used to calculate the sample size for this study. The sample size was.

$$n = Z^2 P (1-P) / (a)^2$$

Where, n = sample size,

p = 50% = 0.5 (estimated prevalence of 50% was used in order to have the maximum sample size)

a = desired level of precision (0.056)

z= value from normal distribution associated with 95% confidence interval of 1.96.

Sample collected = (306)

3.7 Measurement Tools

Face-to-face interviews were conducted by trained personals, using a structured questionnaire. Data was collected on socio-demographic, practice of substance use, knowledge and belief on HIV/AIDS, education to HIV/AIDS care services and HIV/AIDS risk behavior outcomes. Questionnaires were coded to ensure the confidentiality of the study participants. Participants were informed about the background objectives and procedures of the study and their participation was entirely voluntary.

Interview questionnaire for this study consisted five parts:

-Part I Socio-Demographic Characteristics

These section included age, gender, race, marital status, income, migrant status, arrival to Thailand and Mae Sai, living and accommodation status are included.

-Part II. Access to HIV/AIDS health care services

This part included regarding HIV/AIDS education sessions and situation regarding HIV testing.

-Part III. Knowledge and belief of HIV/AIDS

This also included the questions based on the knowledge and belief regarding HIV/AIDS and those were answered as yes, no and don't know. The questionnaire was adapted from the center for AIDS Prevention Studies (CAPS), University of California, San Francisco, USA.

-Part IV. Practices of substance use

This included the practices of substance use including smoking, alcohol, illicit drug use and other substances use. Those included age of first experienced, the reason for first use of the first use substance and current status of usage.

-Part V. Sexual risk behaviors

This part included sexual behaviors and substance use related behaviors. Sexual behavior includes regarding multiple sexual partners and condom usage. Substance related behaviors included the situation of substance use during sexual activities.

3.8 Data collection

The data collection tool was a semi-structured questionnaire consisting of both structured as well as unstructured questions which was prepared in English language, then translated into Myanmar language by one who was expert in English and Myanmar language related to migrants to ensure correspondence between English and Myanmar words. And then, back translation from Myanmar to English was done by a second expert in case of discrepancies between the translation of two experts and came together to agree on a common translation.

Data was collected by face to face interview with the respondents by the researcher and two other research assistants who understand Myanmar language very well. The research assistants were the volunteers from Mae Sai Hospital who have had experience in conducting interview by using questionnaires previously. One volunteer has been working for TB – project for Migrant population in Mae Sai Hospital. The interviewers were trained by the researcher two days prior to the data

collection on how to ask questions to get appropriate answers and making them willing to participate and to build trust before interview.

Due to the scattered distribution of the migrant workers, working time, working nature and their free time, it was very difficult to arrange the time for interview for data collection. At first, introduction regarding the research to the factories' owners and Managers is done by the Public Health Worker from Mae Sai Hospital. After getting agreements, participants were invited for interview. Before inviting, inquiry about the number of Myanmar migrant workers in those factories and asking to ensure to exclude any worker with psychological problems by asking whether there was a person will illness or taking leave during the working period. If present, asking about the reason for taking leave and it was related to illness, request the medical record to ensure that it was not the psychological problems. According to the list, the selection was done with the help of manager or supervisor and they were invited and requested for interview.

Depend on the nature of their work and working hour, most of the interview had been done in their free time especially in the lunch time, in the evening, at night as well as in the weekends in their residences.

Before conducting the interview, the respondents had been explained about anonymity, confidentiality, free participation, freedom to withdraw, access to final report and no use of data for other purposes. They had been shown that there was no name on the answered questionnaire. All data was presented with consolidated tables which did not make it possible to identify the persons who provide the information.

The place of conducting interview was done in suitable place at in their compound or residence during their free time apart from working hours and also this will ensure to keep the respondent's confidentiality and privacy. This was only take about 25-30 minutes to complete. Only in some cases, it was extended a few minutes for more information. As the researcher gave priority to their free time with their willingness to answer the questions, the data collection took place nearly a month to complete the sample size.

3.9 Reliability and Validity

The following activities were carried out to maintain the reliability and validity. The content validity had been made by question consultation with three experts from the field. The content validity had been made and requested according to their opinions, (+1), (0) and (-1) for each question. Then index of item-objective congruence (IOC) were calculated to each questions by total scores of professional by total number of professional i.e (3). If the result is less than 0.5, changes had been done according to their opinions.

A pretest was done at Koh San Road, Bangkok where a lot of Myanmar migrants were working. A 30 number of population was used for the pretest (pilot test) to maintain the reliability. Then, the Conbach's Alpha was calculated and got 0.791 in the knowledge and belief of HIV/AIDS.

3.10 Data entry and data analysis process

The researcher involved in data collection, data editing, data entry, and data analysis and data interpretation. The data entry was done with the use of Epidata software. After the data had been converted into SPSS version 16, checking and cleaning was done. The interpretation of the collected data was presented by following way; descriptive statistics to the factors including the socio-demo characteristics which were influencing in substance use and sexual behavior, mean and standard deviation with the help of percentage is calculated for the continuous data and percentage and frequencies were calculated for categorical data and described by tables. Chi square test was adopted for the analysis of the relation between the independent and dependent variables.

3.11 Ethical consideration

The approval of research was taken from the Ethics Review Committee for Research Involving Human Research Subjects, Health Science Group, Chulalongkorn University. The researcher explained to the participants the reasons, the benefits and the risks linked to this research. Participants were invited to ask for any additional information and clarification they need and then be invited to decide whether they want to participate to the research or not. It was clearly explained to them that if they

refuse to participate they would not suffer any adverse event. After accepting to participate, the interview was started. They could also interrupt participating to the research at any moment and no questions were asked about the reasons for their interruption. Researcher assured them that the findings of this research helped them to address their needs and help to strengthen their behavior related to HIV and substance use. The response given by the migrants and name of the responder will be kept confidential.

3.12 Limitation of the study

There were some limitations which influenced the result of this study. At first, this study was in a few months to complete the whole thesis including data collection, entry, interpretation and presentation. Due to the purposive selection of workers among the Myanmar migrants with the information from Mae Sai Hospital, this cannot be representing as a whole of Myanmar migrants in Mae Sai and also in Thailand. Moreover, this study was a cross-sectional study; it was not possible to describe the true causality between the exposure and the outcome. Random sampling could not be used and therefore, there will be a problem of selection bias.

3.13 Expected outcomes

This study will also provide the basic of knowledge regarding the substance use and sexual behavior in Myanmar Migrants population and its determinants which will also contribute to better planning for health education among the migrants population regarding the substance use and sexual behavior in relation to HIV/AIDS.