

# CHAPTER III

## RESEARCH METHODOLOGY

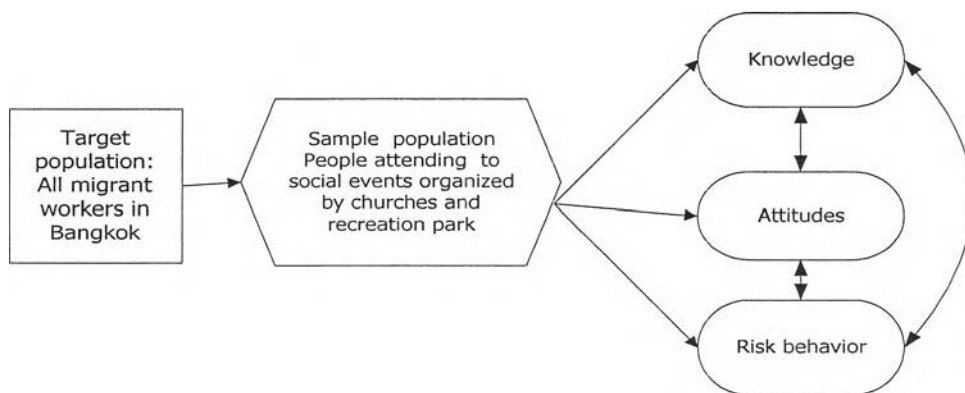


### 3.1 Research Design

A descriptive approach has been used for this cross sectional study to determine the knowledge, attitude and risk behaviors regarding HIV/AIDS among Myanmar migrant workers in Bangkok.

The target population consisted of migrant workers from Myanmar, working in Bangkok. A sample for the survey was drawn from this target population. The sample population was contacted at places of social interest frequented by Myanmar migrant workers. These places were found to be two churches where social events for Myanmar migrants were regularly organized, and a park often visited by Myanmar migrants for recreation purposes.

#### The flowchart of research design



The respondents were administered a questionnaire to gather data on the knowledge, attitudes and risk behaviors of Myanmar migrants towards HIV/AIDS.

### 3.2 Population and Sample

The Ministry of Labor and Social Welfare of the Royal Thai Government, based on its registration of migrants exercise in 2001, reported that there were a total of 76,586 registered migrants from Myanmar who were living and working in Bangkok<sup>1</sup>. It is widely believed that the registration exercise remained quite limited in scope, and only about one-third of the actual number of migrants come forward to get registered. This had implications for sample size, as no reliable information or data was available regarding the Myanmar migrant population in

Bangkok. Further, there were definite time and financial limits for completion of this study. Due to these limitations, the estimated total population of registered and unregistered workers has been represented by a sample expressed by the following equation:

$$n = \frac{N z^2 p q}{d^2 (N - 1) + z^2 p q}$$

n= sample size

N=76,586 (Ministry of Labor and Social Welfare, 2002)

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<sup>1</sup> The registration exercise was launched throughout the country following a Cabinet resolution. Employers applied to the Ministry of Labour offices for registration of the workers from Myanmar, Cambodia and Lao PDR employed by them. A total of 568,249 workers from these countries were registered in this exercise, including 451,335 Myanmar nationals, 57,556 Cambodian nationals, and 59, 358 Laotian nationals.

$d = \text{precision of difference} = 0.05 \text{ or } 5\% \text{ (Absolute diff.)}$

$z = 1.96 \text{ at } 95\% \text{ CI}$

$p = \text{the proportion of composite score of HIV/AIDS knowledge of former study in population of Sangkhlarburi and Ranong, } = 0.4 \text{ (Chantavanich, et al, 2000)}$

$1 - p = q = 1 - 0.4 = 0.6$

$= 367$

The sample size, therefore, consisted of 376 Myanmar migrant workers. The target population for this study was migrant workers from Myanmar, aged 16-40 years, working and living in Bangkok. The preliminary observations of the researcher showed that most of the migrants fitting the profile of the sample group were single and among the sexually active in the population of migrant workers in Bangkok. Although age break-up for the target population was not available, it was also observed that migrants in the targeted age group formed the majority of migrants in Bangkok. It was also evident that lack of registration for a large proportion (if not the majority) of Myanmar migrants meant their limited access to health services because of their irregular status. Due to above considerations, the sample group of migrants was considered to be potentially the most vulnerable with regard to the risk behaviors.

The sample was drawn from Myanmar migrant workers who came to attend social events and occasions organized by two main churches frequented by Myanmar migrants in Bangkok. These churches were the Myanmar Christian Assembly Church, located at Ekamai Soi 16, and the Burmese Ministry Calvary

Baptist Church, located at Sukhumvit Soi 2, Bangkok. Another data collection site was Rama IX Park in Bangkok, frequented by Myanmar migrants for recreation purposes. These locations were among the few places that many Myanmar migrants visited frequently, the churches serving as centers not only for religious activities, but also for weekly social events.

### **3.2.1 Sampling Method**

The respondents for the survey were selected by a quota sampling method that determined their eligibility for inclusion in the sample.

The sample consisted of both female and male migrant workers, following the gender ratio of the Myanmar migrants registered in Bangkok. According to Ministry of Labour and Social Welfare, a total of 76,586 Myanmar migrant workers were registered in Bangkok in 2001. This number included 48,172 females who, therefore, made up 63% of Myanmar migrant workers in Bangkok. Male migrants constituted 37% of the total. The sample size, therefore, followed this distribution consisting of 232 females (63.2%) and males 135 (36.8%).

The researcher then sampled a total of 100 male migrant workers and 100 female migrant workers from Myanmar in a church to determine the occupational distribution. The results of this investigation showed that, among females, 62.5% were housemaids, 12.1% were factory workers, 10.8% were shop helpers, 4.3% were restaurant workers and others were 10.3%. Therefore, the total samples of 232 female migrant workers were divided into occupations as follows: housemaids 145, factory workers 28, shop helpers 25, restaurant workers 10 and others 24.

The investigation also showed that, among males, 53.3% were factory workers, 14.1% were shop helpers, 10.4% were restaurant workers and others were 22.2%. The total sample of 135 male migrant workers was, therefore, divided into occupations as follows: factory workers 72, shop helpers 19, restaurant workers 14 and others 30.

### **3.3 Inclusion Criteria**

The criteria for inclusion in the sample for the survey consisted of the following:

1. Respondents should be Myanmar migrant workers working in Bangkok, attending social events and occasions organized by churches and/or visiting parks for recreational purposes.
2. Respondents should be aged 16-40 years.
3. Respondents should be willing to co-operate in the survey, particularly in replying to the survey questionnaire.

The criteria did not distinguish between Myanmar migrant workers who had been issued work permits following the registration and those who were working without any permits.

### **3.4 Research Instruments**

The survey instrument used for this study was a questionnaire, consisting of the following four parts:

#### **3.4.1 Part I: Socio-demographic Characteristics**

This part of the questionnaire consisted of questions on socio-demographic profile of the sample population, including age, gender, marital status, education, ethnicity, religion, occupation, monthly income, ability in Thai language, access to information on HIV/AIDS and access to health care services. This section of the questionnaire consisted of 12 questions.

#### **3.4.2 Part II: Knowledge Regarding HIV/AIDS**

The questionnaires on knowledge about HIV/AIDS used by Chantavanich (2002) and Yu (2000) were suitably modified and used for the survey. This part of the questionnaire consisted of 10 questions, aimed at finding out as to what extent the sample population had correct knowledge of HIV/AIDS. Four questions were asked for the knowledge about STDs and information about HIV/AIDS.

#### **3.4.3 Part III: Attitudes Regarding HIV/AIDS**

The part of the questionnaires on attitudes regarding HIV/AIDS also developed by Chantavanich (2002) and Yu (2000) was modified for use in the

survey. There were 11 questions in this section aimed at determining the correct and incorrect attitudes of the sample population towards HIV/AIDS.

#### **3.4.4 Part IV: Risk Behaviors Regarding HIV/AIDS**

Similarly, a revised version of the questionnaires developed by Chantavanich (2002) and Yu (2000) was used for this study. This section of the questionnaire consisted of 13 questions, aimed at finding out the frequency of risk behaviors regarding HIV/AIDS among the sample population.

The researcher adapted the questionnaires from the above-mentioned former two studies to the situation of Myanmar migrants. The questionnaire for the survey was first developed in English, which was then translated into Myanmar language by an expert. The questionnaire was pre-tested in the field. This exercise involved 30 migrants chosen according to the inclusion criteria. The questionnaire was administered by four interviewers who were also Myanmar migrants and who were trained for administering the questionnaire by the researcher. In addition, the researcher also administered the questionnaire.

#### **3.5 Reliability and Validity**

Pre-testing of the questionnaire was done with 30 migrant workers from Myanmar who qualified the inclusion criteria, to ensure reliability of the research instrument. Cronbach's alpha method was used to measure reliability. The Cronbach's alpha coefficient reliability for the knowledge part of the questionnaire was 0.8 and for the attitude part was 0.7. A research advisor and a subject expert

checked the content of validity. The questionnaire was revised and amended following the pre-testing findings, and this final version of the questionnaire was used in the main survey.

### **3.6 Setting and Timing of the Study**

As mentioned earlier, the data was collected in two churches and a recreational park frequented by Myanmar migrant workers. In the churches the priest announced at the end of the service the presence of the researcher and briefly mentioned the purpose of the survey, asking the migrants present to extend cooperation to the researcher. Afterwards, those willing to cooperate approached the researcher who explained them further the background and the purpose of the survey. The interviewers made individual appointments with those willing to be interviewed. At the time of the interview, the purpose of the study was explained again to the respondents. The questionnaire was administered by interviewing each respondent separately. The respondents in the Park were contacted and interviewed individually, after the purpose of the study was explained to them. The survey was conducted from January 15 to February 15, 2003.

### **3.7 Measurement Methods**

The data for the study was collected in a survey using a questionnaire. For data analysis, SPSS was used for each of the four parts of the questionnaire. The measurement methods were as follows:



Part I - Socio-demographic factors: The demographic data included age, gender, marital status, occupation, monthly income, education, fluency in Thai language, ethnicity, religion, monthly income, access to information on HIV/AIDS and access to health care services. This section consisted of 12 questions.

Part II - Knowledge Regarding HIV/AIDS: Four questions were asked about the knowledge of STDs and the information about HIV/AIDS. Ten questions were asked to assess the current level of knowledge. The answers were categorized as “yes”, “no” and “don’t know.” The evaluation of the responses was done by giving “1” score for a correct answer and “0” score each for an incorrect answer and a “don’t know” answer. More than 7 correct answers in this part of the questionnaire were considered to demonstrate “good knowledge”, 7 to 5 correct answers were judged as reflecting a “fair knowledge”, and less than 5 correct answers were seen as reflecting “poor knowledge”.

Part III - Attitude Regarding HIV/AIDS: Attitude was measured by 11 questions, consisting of 5 positive and 8 negative statements. Responses were measured on a 0-2 scale ranging from 2 for positive attitude, 1 for “neutral” attitude and 0 for negative attitude. Respondents were categorized as having a “positive attitude” for a score of 18 or more, “neutral attitude” for a score of 10-17, and “negative attitude” for a score of less than 10.

Part IV – Risk Behaviors Regarding HIV/AIDS: This section consisted of 12 questions that were used to measure the individual’s frequency of engaging in risk behaviors in the last one year. The answer choices and related scores for some of these questions included: 0 for “never”, 1 for “sometimes”, 2 for “always”, and

3 for “only in the past”. This scoring applied to questions relating to sexual behavior, where responses including “sometimes”, “always”, and “only in the past” were categorized as risk behavior, except for condom use where “always” was replaced with “never” for the risk behavior. Other questions were scored as: 2 for “yes”, 0 for “no”, and 1 for “don’t know”. These questions were related to blood transfusion and needle sharing in receiving medication by injection.

### 3.8 Data Analysis

The computer program SPSS was used for data analysis. Statistics in terms of frequency, percentage, mean and standard deviation for socio-demographic factors, knowledge, attitudes and risk behaviors were used to analyze the data. Significance and correlation between socio-demographic factors were computed using Chi-square test. Relationships between knowledge, attitudes and risk behaviors were analyzed using Independent Sample t-test.

**Table 1: Dummy table of survey findings**

Socio-demographic factors	Knowledge regarding HIV/AIDS %	Attitude regarding HIV/AIDS %	Risk behaviors regarding HIV/AIDS %
5 main items	→	→	→
		←	

### **3.9 Ethical Considerations**

As this study involved human beings, all possible measures were taken to ensure that participation of respondents in the survey was voluntary and they suffered no negative effects due to their inclusion in the survey. As part of this exercise the proposal for the study was sent to the two churches where the questionnaire was to be administered, for their comments and approval prior to the survey. It was explained to all respondents that they had the right to refuse to refuse their participation in the survey. The questionnaire was administered only after obtaining verbal consent from the respondents.

### **3.10 Limitations of the Study**

Limited time and financial resources were major constraints in undertaking the survey. Also the availability and cooperation of the migrant workers were essential to the study; the migrants fortunately generously extended these though their working schedules sometimes required postponement of the interview appointments. It is acknowledged that the migrants included in the survey, who were approached at social and religious events in the churches and in the park were not representative of all Myanmar migrant workers in Bangkok, given the data limitations governing sample selection. There could be, therefore, some data biases that might influence the findings.

### **3.11 Expected Benefits**

The study provides a measure of the knowledge, attitudes and high-risk behaviors of Myanmar migrant workers in Bangkok. These findings provide a

better understanding of the problem to the public health professionals, including members of the Thai government, NGOs and community organizations working with migrants on health issues, especially concerning HIV/AIDS.

The survey included 367 migrant workers from Myanmar, who after going through the interview and related discussion were exposed to further knowledge regarding HIV/AIDS. The expected outcome is that the migrant workers living in Bangkok area will demonstrate greater knowledge regarding HIV/AIDS than before. Further, the level of knowledge demonstrated by Myanmar migrants in Bangkok, an urban area, will be compared with the results of a similar study conducted in Sangklaburi, a rural area, by Chantavanich et al (2002), which should help to distinguish rural/urban differences with regard to Myanmar migrant workers and HIV/AIDS.

A final anticipated outcome is that this study will improve the understanding and knowledge of researchers regarding methodology and practice of health related research.

### **3.12 Follow-up**

Based on the results of this study the future university students would be able to conduct in-depth research with groups of Myanmar migrant workers having high levels of risk behavior. Another avenue of exploration would be to conduct the same study with greater geographical coverage and a larger sample size.

Also, based on the results, it can be determined which group of Myanmar migrant workers should be targeted for more education and awareness raising initiatives from NGOs or the Thai Government. This study can then be used as a baseline to evaluate the effectiveness of future awareness programs, by comparing levels of knowledge after the implementation of such programs with the results of this study.