



CHAPTER III

RESEARCH METHODOLOGY

3.1 Research Design

Cross-sectional exploratory study with both quantitative and qualitative approaches was used to assess Myanmar migrant workers' accessibility to and their perceptions on existing HIV-related health education including sexually transmitted infections (STI), and their preferences for HIV-related health education.

3.2 Instruments

Interview questionnaire in Myanmar language was used. It was structured and divided into four sections: (1) socio-demographic characteristics and registration status, (2) accessibility to existing HIV-related health education, (3) perceptions on existing HIV-related health education, and (4) preferences for HIV-related health education. An open-ended qualitative question was added at the end of the structured interview questionnaire.

3.3 Target Population and Study Area

The study was done among estimated number of 80,000 Myanmar migrant workers in Muang District of Ranong Province, Southern Thailand.

3.4 Study Population

Myanmar migrant workers between the age of 15 – 49 years, male and female, registered and unregistered, from different backgrounds, and with different types of occupation were included in the study population.

3.5 Sample Size

$$\text{By, using Daniel's formula, sample size, } n = \frac{N z^2 p (1 - p)}{d^2 (N - 1) + z^2 p (1 - p)}$$

(Daniel, 1998)

Where, $N = 80,000$ (Estimated total numbers of Myanmar migrant workers with the ages from 15 to 49 years in Muang District, Ranong Province, Thailand)

$z =$ the reliability coefficient (confidence level) at 95% CI = 1.96

$p =$ proportion of accessibility to HIV-related health education = 0.3
(from the result based on the WVFT Annual Report, 2006;
PHAMIT Ranong Migrants' Vulnerability to HIV/AIDS, 2005)

$d =$ absolute precision of study = 0.05 (acceptable error)

$n = 321$

Total 357 subjects were interviewed in order to cover about 10% of refusals and incomplete or invalid data.

3.6 Sampling Methods

Due to great mobility of Myanmar migrant workers, their different work nature and hours, geographically scattered distribution, and large proportion of unregistered workers of target population, convenience random sampling was used. However, as fishermen, fishery-related workers (mostly wives of fishermen), and other groups of sex workers (SW) and men who have sex with men (MSM) were in high risk groups, some adjustments in sample size allocation were done to over-represent those high-risk groups. (See Table 1)

In Muang District of Ranong Province, the majority of the Myanmar migrant workers and their families live and/or work in particular groups and in particular areas (zones), mostly depending on the similar types of occupation or ethnicity. In each particular area (zone), the subjects were selected by convenience random sampling, and interviews were done accordingly. Most subjects were enrolled in their residential areas, and some at their workplaces.

Exclusion Criteria for Subject Selection

- The subject who do not match with ethical considerations
- Under 18 years and over 49 years of age
- Health staff from government and NGOs
- Less than six months of current type of occupation
- Less than six months of stay in Ranong, Thailand
- AIDS patients and other severely-ill patients

Table 1: Population Distribution of Myanmar Migrant Workers by Types of Occupation, and Numbers of Subjects Interviewed

Types of Occupation	Estimated No. (15-49 Yr.)	(%)	No. of Subjects Needed	No. of Subjects Interviewed
Fisherman †	7,500	9.4%	33	55
Fishery-related Worker †	22,000	27.5%	96	109
Domestic Helper	3,500	4.4%	15	14
Agriculture/ Rubber Plantation/ Livestock Worker	15,000	18.8%	66	40
Construction / Factory Worker	5,000	6.3%	22	18
General / Random Labor	26,300	32.9%	115	101
Others (SW, MSM) * †	700	0.9%	3	20
Total	80,000	100.0%	350	357

* Sex Workers and Men Who Have Sex with Men. † High-risk occupational group.

Source: Estimates from Muang District Health Office, Ranong Province, 2007.

3.7 Measurement Variables

Frequency distribution of age, sex, marital status, income, education, types of work, duration of stay in Thailand. Their accesses to HIV-related education, and their choices of health education settings, were measured. Their opinions of why they prefer which settings and how they want to be were recorded.

Independent Variables

- (1) Socio-demographic characteristics
- (2) Registration Status
- (3) Types of existing HIV-related health education

Dependent Variables

- (1) Types of HIV-related health education
- (2) Accessibility to existing HIV-related health education
- (3) Perceptions on existing HIV-related health education
- (4) Preferences for HIV-related health education

3.8 Questionnaire Field Test

Before starting data collection, a total of three visits to Ranong were made for rapid assessment. During those three visits, meeting and discussion with local health authorities, health personnel from Ranong World Vision Office, community health workers and some migrant workers were done, and suggestions were received. Then, some revisions were done accordingly for better set up of data collection and also questionnaire design.

3.9 Data Collection

Because of the great mobility and geographically scattered distribution of the migrant workers, their working nature and working hours, and their free time and willingness for interview, it was very difficult to arrange for data collection. Therefore, with assistance of two Myanmar local persons, field visits, subject selection and interviewing were done in both day time and in the evening, and in their residences and their workplaces as well.

Before interview, the purpose, process, confidentiality and ethical issues and benefits of the study were explained. After getting the informed signed consents, the interview questionnaires were asked. For an open-ended question, migrant workers

were interviewed, and their feelings and expressions on HIV-related health education were note-taken. The whole interview took 25 - 30 minutes in average.

3.10 Statistical Application

For descriptive information, socio-demographic characteristics, and their accessibility to, perceptions on, and preferences for HIV-related health education were analyzed and described as frequency distribution tables. For hypothesis testing, bivariate analysis were conducted to find out the associations between:

- (1) Socio-demographic characteristics and registration status of these workers, and their accessibility to, perceptions on and preferences for existing HIV-related health education
- (2) Longer length of stay in Ranong, registered workers and high-risk target groups, and more frequent access to existing HIV-related health education.
- (3) All the target groups and greater preference for participatory HIV-related health education
- (4) Lower level of education and high-risk target groups, and greater preference for participatory HIV-related health education

Dependent variables were constructed as both continuous and categorical variables. Non-parametric independent and related samples tests were used for both continuous and categorical dependent variables. Bivariate correlation was used for some continuous variables.

For qualitative information, the feelings, opinions, suggestions and expressions of the subjects on HIV-related health education were reviewed, and according to the

groups of expressions based on similarity of their opinions, expectations, suggestions, etc., descriptive analysis were done. Then, some of the remarkable expressions were quoted and described as supplementary qualitative observations.

3.11 Validity Test

In order to ensure content validity of the questionnaire, it was done by reviewing previous literature and studies, and by consulting three content experts.

3.12 Ethical Consideration

- (1) Under the guidance of College of Public Health Sciences, Ranong Provincial Health Office, and local authorities, this study was done.
- (2) Interviewees were received full explanation about the study including the purpose, process and benefits of the study.
- (3) Informed signed consents were taken from the interviewees, considering:
 - Willingness to participation
 - Freedom of withdrawal
 - Confidentiality
 - Convenience
 - Non-discrimination
 - Access to final report or results of the study if desired
 - Assurance of data not to use for other purpose

3.13 Expected Outcomes and Benefits

It is expected that the results of this study would be useful for the review and planning of health education, health promotion, information, education and communication (IEC) materials development, and behavior change communication (BCC) interventions regarding HIV/AIDS prevention and control among Myanmar migrant workers in similar settings in Thailand and elsewhere.

3.14 Limitations and Solutions

Great mobility and geographically scattered distribution of the migrant workers, unfamiliarity with the migrant community, their working nature and working hours, their free time and willingness for interview, their cultural sensitivity to HIV-related issues, and their feeling of insecurity towards a stranger (interviewer) became the big challenges during data collection. To overcome those, two Myanmar local persons, who are very familiar and well-experienced with the nature of Myanmar migrant communities, were hired to assist in the data collection process of the study, except interviewing. Apart from those issues, everything was fine especially dealing with local health authorities, implementing NGOs and Myanmar migrant communities.