

CHAPTER III

RESEARCH METHODOLOGY

3.1 Research Design

It was a descriptive cross-sectional survey.

3.2 Sample Population

Migrant women from Myanmar aged 15-60 years in Mae Sot Sub-District, Tak Province, Thailand.

The reason for selecting women was that:

- They are caretakers of the family.
- They are more likely to stay at home than man.

3.2.1 Sample Size

$$\begin{aligned}
 n &= \frac{N z^2 p q}{d^2 (N-1) + z^2 p q} \quad (\text{Daniel , 1987}) \\
 &= \frac{1,014 (1.96)^2 * 0.5 * 0.5}{(0.05)^2 (1,014-1) + (1.96)^2 * 0.5 * 0.5} \\
 &= 279
 \end{aligned}$$

n = sample size

N = 1,014, number of Myanmar community households in Ma Sot Sub-District during 2002 (Source: Mae Sot General Hospital)

z = the reliability coefficient at the 95% CI = 1.96

p = proportion of knowledge assumed 50% = 0.5

(as it will give the maximum sample size)

$$q = 1-p = 0.5$$

d = absolute precision of difference = 0.05 or 5% (acceptable error)

When adding 10% of the 279 samples for dropouts, the sample size became

$$279 + 28 = 307$$

3.2.2 Sampling Technique

Systematic random sampling method was used to select 307 households out of 1014 Myanmar households in Mae Sot Sub-District. First, a Myanmar migrant house was randomly selected. Starting from the randomly selected house, every third house was selected. One woman caretaker per household was interviewed according to the inclusion criteria.

3.2.3 Inclusion Criteria

- Migrant women from Myanmar.
- Main caretaker of the family in Mae Sot Sub-District.
- Age 15-60 years.

3.3 Research Instrument

The research instrument was a face-to-face interview using structured questionnaire. The questionnaire was translated from English to Myanmar by two independent translators, compared and adjusted to make sure that the original meaning was retained.

The questionnaire was divided into five sections as follows.

Part I: Demographic Characteristics

This part of the questionnaire included 7 questions about age, education, occupation, race, marital status, monthly family income, and duration of stay in Mae Sot of the sample population.

Part II: Source of Information about Dengue Fever

This portion of the questionnaire included 3 questions inquiring the sample population whether they had ever received information about Dengue Fever, the source that could give them dengue information most, and the presence of DHF cases in family/friends.

Part III: Knowledge on Dengue Fever

There were 10 questions in this part of the questionnaire, asking the basic knowledge of the respondents concerning cause, transmission, symptoms, treatment, and prevention of Dengue Fever.

Part IV: Attitude regarding Dengue Fever

In this portion, there were 8 questions about beliefs on susceptibility, seriousness, and threat of Dengue Fever.

Part V: Practices regarding Dengue Fever Prevention

There were 13 questions in this part, asking about the practices of the sample population concerning prevention of Dengue Fever.

3.4 Quality of Research Instrument

3.4.1 Validity

Content validity was ensured by taking suggestions from experienced persons.

3.4.2 Reliability

The questionnaire was pretested with 20 Myanmar migrant woman caretakers living in Mahachai, Thailand. The Cronbach's alpha Coefficient for internal consistency was 0.85 for knowledge part of the questionnaire; 0.78 for attitude portion; and 0.75 for practice portion.

3.5 Data Collection

Data collection was done by face-to-face interviews using structured questionnaires from January 23 to January 26. Nine interviewers were involved in this survey in which seven were from the Mae Sot General Hospital, and the other two were MPH students from College of Public Health. The interviewers were trained before Data Collection to familiarize with the purpose and meaning of the questionnaire. There were also some role plays of actual interview situations.

3.6 Ethical Consideration

Informed consent (in Myanmar language) was taken from all respondents before data collection. Informed consent included full description and explanation of the research, confidentiality and voluntary participation.

3.7 Data Analysis

It was a descriptive statistical analysis using frequency, percentage, mean, and standard deviation.

Hypothesis testing: Chi-square test was used for identifying association between variables.

3.8 Limitations

This study represents the Myanmar migrant community in Mae Sot Sub-District only and does not represent the whole migrant population in Mae Sot District.

The study design was a cross-sectional survey; therefore it could not look at practices regarding Dengue Fever prevention over time.

3.9 Application Benefits

The result of this study is expected to be useful as a baseline data in future health promotion intervention programs by International Non-Governmental Organizations. It will also identify possible needs for further research.