

CHAPTER III

RESEARCH METHODOLOGY

3.1 Site of the study

This study was taken place in Phang Nga Province, Thailand. The estimated registered migrant population is 22,284 and the non-registered migrant population is estimated as twice of that population (IOM, 2005). Among this population, female migrant workers comprise 33 percent and the reproductive age group takes part 77.6 percent (IOM, 2007).

The majority of migrant workers are Tawai ethnic group and there are also Mon and Yakai which constitute small proportion. Most of the migrant workers work in agricultural and animal husbandry. They also work as general labors, factory workers, construction workers and fisher men (WVFT, 2007).

3.2 Research Design

Cross sectional study design was used to describe the contraceptive usage among Myanmar migrant women of reproductive age and also determined the relationship between the independent and dependent variables.

3.3 Study Population

The population in this study was Myanmar migrant women reproductive age group between 15 to 49 years residing in Takuapa District and Kuraburi District, Phang Nga Province.

3.4 Sample Size

The sample size was calculated by the formula below:

$$n = \frac{Z_{\alpha/2}^2 (p \times q)}{d^2} \quad (\text{Daniel W W, 8}^{\text{th}} \text{ edition})$$

n = minimum sample size

α = level of significance = 0.05

$Z_{\alpha/2}^2$ = critical value for 95% confidence level = 1.96

d = error allowance = 0.05

p = proportion of targeted population estimated to have practice of
contraception = 32.41% = 0.3241 (Prevalence of contraceptive use
among Myanmar migrant women of reproductive age is 32.41% in
2006) (CCSDPT, 2006)

q = 1 - p = 1 - 0.3241 = 0.6759

From above formula,

$$n = \frac{Z_{\alpha/2}^2 (p \times q)}{d^2}$$

$$n = \frac{(1.96)^2 \times (0.3241) \times (0.6759)}{(0.05)^2}$$

$$= 336.6$$

Total sample size = 337

Sample collected = 326

3.5 Sampling Technique

There are 8 districts in Phang Nga province; Takuapa District and Kuraburi District were selected purposively. For collecting the sample, cluster sampling method was used. There are 8 sub-districts in Takuapa District and 4 sub-districts in Kuraburi District. The sub-district was collected by random sampling and all women age between 15-49 years in that sub-districts were asked. The sample in one district collected was not enough, so another sub-district was collected until the sample met the required number. 3 sub-districts in Takuapa District and 1 sub-district in Kuraburi District were collected.

3.5.1 Inclusion criteria

- Myanmar migrant women who are between reproductive age of 15-49 years.
- Myanmar migrant women, who are mentally sound, want to give verbal consent and willing to participate.
- Myanmar migrant women who can speak Burmese language fluently.

3.5.2 Exclusion criteria

- Myanmar migrant women who had pregnancy at the time of interview.

- Myanmar migrant women who are not mentally sound, who do not want to give verbal consent and not willing to participate.
- Myanmar migrant women who had hysterectomy and menopause although they are within reproductive age.
- Myanmar migrant women who have hearing disability.

3.6 Data Collection Tool

The data was collected by structured questionnaires. The draft questionnaire was pre tested prior to data collection.

In the questionnaires,

- Socio-demographic characteristics such as age, religion, marital status, marital duration, occupation, education, total family income, number of living children, and migrant status in Thailand
- Knowledge about contraceptive methods and use
- Attitude towards contraceptive use
- Accessibility to family planning services in terms of distance and transportation to service, cost and affordability, satisfaction to service and source of information
- Current usage of contraceptive methods was asked.

3.7 Data Collection

Data was collected by face to face interviews of the studied population. The questionnaire was translated into Burmese language.

4 female staffs from FED organization in Takuapa District were trained for one day prior data collection and guideline was used to reduce interviewer's bias.

All the respondents were asked the same questionnaire. After completion of interview, the interviewer checked the error or the omission of interviewer and the questionnaire was checked by the researcher immediately after interview.

3.8 Data Analysis

Questionnaire was coded before entering the data to computer by the researcher. The sample database was checked by double entry.

For data analysis, SPSS software was used.

Descriptive statistic such as frequency, percentage, mean and standard deviation was used.

In order to determine the relationship between the independent and dependent variables, Chi-square test and Fisher's Exact test were used.

For knowledge and attitude variable, several questions concerning about the opinion of the contraceptive usage by respondents was asked. The score was given according to the respondent's answer and then the scores were summed up.

The knowledge part consisted of 18 questions and the score was 1 for correct answer and 0 for incorrect or no response or missing value answer. The highest score was 18 and the lowest was 0. The level of knowledge was categorized into three groups:

- High knowledge : > 80% of total score
- Moderate knowledge : 60-80% of total score
- Low knowledge : < 60% of total score (Khaing, 2002)

Attitude was measured in 5 categories according to the Likert scale (McDowel & Newell, 1996). The attitude part consisted 9 questions and the questions consist of both negative and positive aspects. For positive questions, the score was given 5 for strongly agree, 4 for agree, 3 for uncertain, 2 for disagree and 1 for strongly disagree. For negative questions, the score was given 5 for strongly disagree, 4 for disagree, 3 for uncertain, 2 for agree and 1 for strongly agree. The highest score was 45 and the lowest score was 9. The standard point for the attitude was mean \pm standard deviation. The score lower or equal mean – standard deviation refers to negative attitude. The score higher than mean + standard deviation refers to positive attitude and the score within mean + standard deviation and mean – standard deviation refers to moderate attitude. The level of attitude was divided into 3 levels according to mean and standard deviation of the score of attitude:

- Positive attitude : \geq mean + standard deviation
 - Moderate attitude : between mean + standard deviation and mean – standard deviation
 - Negative attitude : \leq mean – standard deviation
- (Sable M R et al., 1997)

3.9 Reliability and Validity

3.9.1 Reliability

The reliability was pre tested on the similar population in Samut Sakorn Province on 30 women of reproductive age. Cronbach's alpha coefficient was used to measure reliability of the data collection tool. The Cronbach's alpha coefficient was 0.7.

3.9.2 Validity

Validity was the ability to measure what it is designed to measure. The content and face validity were checked by experts after constructing the draft questionnaire. The validity was revised after testing the questionnaire.

3.10 Ethical Consideration

Before the interview, the purpose of the study was explained to the respondents. Then oral consent as well as written consent was taken from each respondent. The name of respondent was not recorded and data was coded. The respondents were feel free to participate or withdrawal any time through out the interview. Privacy was maintained throughout the interview. All the data was kept confidentially except for the further health education or implementation for migrant workers and none of the questionnaires could be traced back to the respondents.

3.11 Limitation of the Study

- This study was done among Myanmar migrant women in Takuapa District and Kuraburi District, Phang Nga Province only so that the findings could not be generalized to the whole Myanmar migrant population.
- Because of the time constraint and the study was based on the convenience due to the mobile population, there might be bias in this study.
- This study was the cross sectional study; it could not include the changes among migrant population over time.
- Because of not obtaining the permission of the owner of some construction and police in some area, not all the migrant women in the sub-districts were

collected. For that matter, sample size was not attained up to the actual sample size.

3.12 Benefit of the Study

This study provides base line information about contraceptive usage among Myanmar migrant women for health authorities for further promoting contraceptive usage and family planning knowledge to Myanmar migrant women.