

## **CHAPTER III**

### **RESEARCH METHODOLOGY**

#### **3.1 Research design**

The research design was a cross-sectional descriptive study of factors influencing HIV positive pregnant women to participate in the PMTCT program.

#### **3.2 Study site**

This study was carried out in the Mae Tao Clinic, Mae Sod district, Tak province, Thailand. - Mae Tao clinic is located on the Thailand-Myanmar border about 500 kilometers Northwest of Bangkok. The clinic provides free healthcare for Myanmar migrants, refugees and internally displaced person (IDPs), as well as administering the PMTCT program for Myanmar migrant pregnant women.

#### **3.3 Population and sample**

The target population is all HIV positive Myanmar migrant pregnant women on the Thailand-Myanmar border in Mae Sod, Tak Province, Thailand. The study population is Myanmar migrant pregnant women who tested HIV positive at the Mae Tao Clinic Antenatal Care (ANC) unit between January 2003 and November 2005.

**(i) Inclusion criteria**

Pregnant women who had visited the Mae Tao Clinic ANC unit since January 2003 to November 2005, tested HIV positive, and had already given birth at the time of study.

**(ii) Exclusion criteria**

1. HIV positive women who were mental ill.
2. HIV positive women who had severe health condition.

**3.4 Sample size**

Because there were 119 eligible women in the logbook receiving treatment over the past three years, the research has included all of them in the research. Twenty-eight women were excluded from the study for two reasons: fourteen had died, and fourteen were either severely ill or had mental illness. The sample size was 91 (Table 3.1).

**Table 3. 1: Sample size**

<b>Items</b>	<b>n (%)</b>
Total HIV positive women	119 (100.0)
Excluded from study due to exclusion criteria	
• Death	14 (11.8)
• Mental illness or severe health condition	14 (11.8)
Total planned interviews	91(76.4)

### **3.5 Subject selection procedure**

- (1) All of 91 HIV positive women in the logbooks were informed about the study through their own counselor (the person who knew their HIV status) when she visited the program (Mae Tao Clinic). If they agreed, informed consent was obtained for them to become a study subject.
- (2) All of the 91 HIV positive women listed in the logbooks who were not visiting the program site during the research period were contacted directly at their home by the counselor. Informed consent to participate in the study was obtained at their home and the interview took place in the home. Those women, who refused interview, were not interviewed.

### **3.6 Research Instrument**

The questionnaire was comprised of six parts:

- 1.Socio-demographics
- 2.Knowledge regarding mother to child HIV transmission
- 3.Attitudes regarding mother to child HIV transmission
- 4.Access to health care service (PMTCT program)
- 5.Economic status
- 6.Social support.

The six parts were as follows:

Socio-demographic characteristics of HIV positive women include age, residence, marital status, number of children, education level. Knowledge of mother to child HIV transmission of HIV positive pregnant women includes mother to child HIV transmission and prevention. There were 3 multiple-choice questions and 3

closed-ended questions. One correct answer was given one point and an incorrect or unknown answer was given a zero. The scores ranged from 0-12. Criteria of knowledge evaluation are shown below.

0-70% (0-8 score) =Low level of knowledge about HIV-MTCT

71%-100% (9-12) =High level of knowledge about HIV-MTCT

Attitude of mother to child HIV transmission of HIV positive pregnant women includes mother to child HIV transmission and prevention. The scores are detailed below

#### **Questions about positive attitude related to mother to child transmission.**

Choices	Yes	Not sure	No
Points	2	1	0

There were 4 closed-ended questions and the range of the scores of the attitude towards the HIV-MTCT is 0-8 scores. There were 2 criteria for analysis.

Criteria of Attitude evaluation as shown below.

0-70% (0-6 score) =Negative attitude about HIV-MTCT

71-100% (7-8 score) =Positive attitude about HIV-MTCT

Access to health care service, in this part has eight questions, which focus on staff attitude, information available, location of health services, personal satisfaction, etc. The criteria for scoring were as follows. The accessibility to health service total scores was 14.

0-70% (0-10 score) = Inaccessibility to health service

71-100% (11-14 score) = Accessibility to health service

Economic status: in this section, questions focus on economic status of HIV positive women. The scoring given was as follows. The economic status total score was 7.

Less than 70% (1- 5 score)	=	Low economic status
70-100% (6-7 score)	=	High economic status

Social support: this part includes the family type of HIV positive women, the person who knows of their HIV status, and moral support from different persons in their community. The scoring given is as follows:

According to the scoring in this section there were two criteria. The social support total score was 11.

Less than 70% (1- 8 score)	=	Low social support
70-100% (9-11 score)	=	High social support

### **Validity and Reliability of Instrument**

The validity of the questionnaire content was verified in consultation with three HIV/AIDS experts. Reliability of the questionnaire was amended and tested with a sample group similar to the study population, which was comprised of ten clients at the Mae Tao Clinic, Mae Sod district in Tak province. The instrument was tested for reliability using *Cronbach's Alpha Coefficient* and was 0.85 of knowledge related to HIV/AIDS.

### **3.7 Data collection**

The questionnaire was used in individual interviews of subjects by two trained interviewers to collect independent variable data. For those who had completed ARV prophylaxis, there was a review of the medical records of patients to collect dependent variable data.

### **3.8 Data management**

Two trained interviewers collected the data by using the questionnaire; each questionnaire was reviewed upon completion and data entry was done using the SPSS version 11.5, software with double-checking. The data was then summarised and presented.

### **3.9 Data analysis**

All of the data items were given codes, rechecked, and analysed using a significance of 0.05. Data analysis was done as follows.

(i) The descriptive statistics analyzed the characteristics of the study group such as, predisposition, enabling and reinforcing factors, as well as HIV positive pregnant women's completion of ARV prophylaxis was used on percentages, frequency and rates.

(ii) Inferential statistics summarised data to determine association between each variable and HIV positive pregnant women's completion of ARV prophylaxis in the PMTCT program as the following.

**Predisposing factors were:**

Association between age of HIV positive pregnant women and their completion of ARV prophylaxis in PMTCT program was done using chi-square. (A statistical technique that can determine whether the groupings of cases on one variable are related to the groupings of cases on another variable).

- Association between number of children of HIV positive pregnant women and their completion ARV prophylaxis in the PMTCT program was done using chi-square.
- Association between education level of HIV positive pregnant women and their completion ARV prophylaxis in the PMTCT program was done using chi-square.
- Association between knowledge and attitude towards prevention of HIV mother to child transmission of HIV positive pregnant women and their completion ARV prophylaxis in the PMTCT program was done using chi-square.
- Association between marital status of HIV positive pregnant women and their completion ARV prophylaxis in the PMTCT program was done using chi-square.
- Association between resident of HIV positive pregnant women and their completion ARV prophylaxis in the PMTCT program was done using chi-square.

**Enabling factors were:**

- Association between accessibility to health service of HIV positive pregnant women and their completion ARV prophylaxis in the PMTCT program was done using chi-square.
- Association between migration status of HIV positive pregnant women and their completion ARV prophylaxis in the PMTCT program was done using chi-square.

- Association between economic status of HIV positive pregnant women and their completion ARV prophylaxis in the PMTCT program was done using chi-square.

**Reinforcing factors were:**

- Association between the social support of HIV positive pregnant women and their completion ARV prophylaxis in the PMTCT program was done using chi-square.