

## **CHAPTER III**

### **RESEARCH METHODOLOGY**

#### **1. Site of study:**

The study was conducted in Tuandao commune, Sondong district, Bacgiang province, Vietnam.

The total population of Tuandao commune is about 4,000 with 500 households. Married women of childbearing age are about 1,000. Almost all people are farmers, doing forestry and agriculture. There is one commune health center staffed by six health workers including one doctor, one assistant doctor, two assistant doctors for obstetrics and pediatrics, one assistant doctor for traditional medicine, and one nurse. Private clinics and drug stores are not available in this area.

The data collection was carried out from 2 to 28, January, 2004.

#### **2. Research design:**

This research was a cross-sectional study, which aimed to describe the utilization of contraceptives among married women of childbearing age in the commune.

#### **3. Sampling**

##### *Study population:*

The study population was married women of childbearing age from 15 to 49 years in Tuandao commune, Sondong district, Bacgiang province, Vietnam (estimated 1000 people).

### **3.3. Sample size:**

In order to determine the sample size, the following formula was used:

$$n = \frac{Z_{\alpha}^2 P(1-P)}{d^2}$$

Where d= precision or difference = .05

Z= 1.96 at 95% CI

P= the proportion in population. In previous studies, the percentage of married women in childbearing age using contraception in the rural areas was estimated 50% (Vietnam Health statistic Yearbook, 2001).

Applying this formula the required sample size was 384. The sample size was increased to 400.

### **3.4. Sampling technique:**

The study sample was selected by systematic sampling. The estimated number of married women of childbearing age in the commune (N= 4,000 x 25% =1000, 25% of total population) was divided by the desired sample size (n= 400). Yielding a sampling interval of 2.75 means that every 3rd case was chosen from the sampling frame till we have 400 respondents (the sampling frame was provided by Tuandao Commune Committee).

## **4. Data collection instrument:**

Data were collected by face-to-face interview, using a structured questionnaire. A total of 41 questions were asked about:

- (1) Socio-demographic characteristics, which included age, education, occupation, family income, fertility, and number of children.
- (2) Attitude towards the Commune Health Center
- (3) Current use (or not use) of contraceptives, including reasons
- (4) Respondents' perceived need to use contraceptives .

## **5. The process of data collection:**

### ***5.1. Preparation phase:***

The data were collected by five interviewers who were all female health volunteers in Tuandao commune. A training course on interviewing skills and an orientation to the study was organized for interviewers in order to provide them knowledge and skills to collect data.

### ***5.2. Data collection phase:***

All respondents were asked exactly the same set of questions. The exact wording of each question was specified in advance and the interviewer read each question to the respondents.

After completion of each interview, the interviewers checked all completed questionnaires for errors, or omissions. Interviewers and researcher checked the questionnaire immediately after the interview.

## **6. Data analysis**

The checked questionnaires were coded before entering data into the computer by the researcher. A sample of the database was crosschecked by double entree.

The data was analyzed based on the study objectives by using a descriptive statistical analysis:

- (1) In order to identify use of contraceptives; to describe the socio- demographic characteristics of respondents, and to describe the types of contraceptive methods used; the descriptive statistics such as: frequencies, percentage were determined with SPSS.
- (2) In order to determine the relationships between independent and dependent variables, the Chi-square Test, Fisher's Exact Test were be used.

## **7. Reliability and validity**

### ***3.7.1. Validity:***

Content and face validity refers to the validation of the instrument. After constructing the draft questionnaire, it was checked by experts.

A pretest of the questionnaire was be conducted with 30 respondents in Sondong district, Bacgiang province, Vietnam. Pre- testing of the questionnaire was used to test face validity of the Vietnamese version of the questionnaire.

### **3.7.2. Reliability:**

Pre-testing of the questionnaire was done to ensure reliability of the instrument with 30 married women in Bacgiang province, Vietnam. Cronbach's alpha coefficient was used to measure reliability. The reliability coefficient was .82

The questionnaire was prepared both in English and in Vietnamese. The questionnaire was translated from English into Vietnamese independently by two Vietnamese students. The result was compared and in order to avoid language bias.

## **8. Ethical issue**

Respondent's oral consent was taken:

- (1) Privacy, confidentiality and anonymity was maintained
- (2) The purpose of the study was explained to respondents.
- (3) Respondents were free to participate or withdraw.

Each questionnaire included a box to be read by interviewers in front of interviewees.

## **9. Scope and limitation:**

*(1) Scope:*

- Structured interviews have a high response rate and interviewers can help with an immediate clarification, follow up and probing of responses.
- Interviewers were female health volunteers of Tuandao commune, so they had experience being with local people and had basic knowledge about health.

(2) *Limitations:*

- Use of contraceptives can be a sensitive issue, especially abortion, although legal in Vietnam, which may cause a possible response bias.
- Sub-groups among respondents for certain variables needed to be merged to facilitate the Chi-square test.