

CHAPTER 3

METHODOLOGY

This study is a descriptive study, aimed at describing the menopausal symptoms and health practices among middle aged Thai Muslim women in order to identify a relationship between menopausal symptoms and health practices.

The Population and Sample

High Percentage of Muslim living in the 5 province of Southern Thailand including Songkla, Narathiwat, Pattani, Yala and Satoon. Songkla is a province in the southern part of Thailand where there are many Muslim people living. Amphur Chana, Songkla was selected, as the area of study because of its largest Muslim population. About 60 percent of the population in Amphur Chana are Muslim (Chana's public health coordinator committee, 1999). The census number of Muslim people in Amphur Chana was 51,167 (Department of local administration Ministry of interior: <http://www.dola.go.th/model/dola-model.htm>) and 4411 were middle aged women.

The number of subjects needed was derived using the following formula;

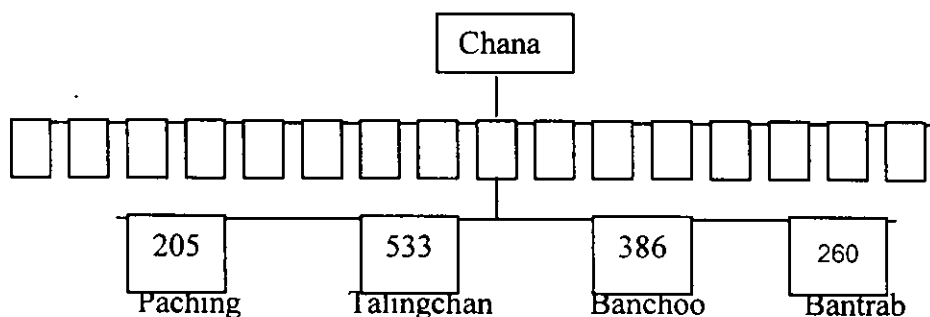
$$n = \frac{N}{1 + (N)(e)^2} \quad (\text{Yamane, 1967})$$

N = Middle aged Thai Muslim women in Amphur Chana (4411)

e = error estimation, this study used 0.05

n = 366 subjects

To recruit 366 subjects into the study, 4 districts were selected out of the 16 districts by simple random sampling, they were Paching, Talingchan, Banchoo, and Bantrab. Then the number of subjects from these 4 district was determined based on the population of the district. The 366 subjects from these 4 districts were recruited by convenient sampling.



The formula used to calculate the Muslim subjects in each district was

$$n = \frac{366 \times N}{4411}$$

n = number of the subject needed in each district

N = population of middle aged Thai Muslim women in each district

Based on this formula, 54, 140, 108, and 64 were recruited from Paching, Talingchan, Banchoo, and Bantrab respectively. They were selected purposively based on the following inclusion criteria;

1. Thai Muslim women aged between 40- 59 years.
2. The subjects must not be pregnant during the study.
3. They must be willing to participate in this study.
4. They have to be well oriented and able to communicate.

Instruments

The research instrument for this study was a questionnaire comprising 5 parts: demographic data, health history, menstrual history, menopausal symptom lists and health practices.

Part 1: The 8 demographic questions sought information on the subjects' age, marital status, occupation, education, family income, number of children, present illnesses and medication.

Part 2 : There were 6 questions which sought information on health history.

Part 3 : There were 9 items seeking information on menstrual history.

Part 4 : Menopausal symptoms questionnaire (MSQ) was composed of 43 symptoms which were modified from Perz (1997). The subjects were asked to rate the occurrence and severity of each symptom. The symptoms were operationally defined and scored separately for both frequency and severity on a 4 point rating scale, which provides sensitivity in detecting changes in symptomatology. Frequency was measured on a 4 point rating scale, 1 for "never" and 4 for "almost always". "Never" means not at all in the last months and "almost always" means daily in the last months. The sexual history (items 1-3), were explored only in the married subjects, the data of these three items were analyzed and reported separately, so the possible total score for frequency was 40-160. Severity of the symptoms was also measured on a 4 point scale. 1 for "no symptoms" and 4 for "severe". "Not applicable" means symptoms were not experienced and "severe" refers to a strong change or sensation from symptoms. Possible total score for severity was 40-160. These 43 menopausal symptoms could be classified into 3 categories; 20 items as general-somatic, 9 vaso-somatic , and 14 psychological items.

Part 5 : Health Practices Questionnaire was developed by the researcher

based on Rungrattrakul (1999) and the literature review. The health practices recommended for middle aged women consisted of 6 domains comprising 35 items including nutrition, exercise, sleep and rest, stress management, elimination, and general responsibility for health. The responses from each item yield a score of 0-3. A score 0 for none and 3 for regularly. The 35 items yield a score of 0-105. The items numbered 4, 5, 6, 9, 10, 12, 22, 26, 29 and 30 are negative statements and classify score 0 for regularly and 3 for none. The level of health practices were classified into poor, fair, average, good, and excellent based on percentage grouping of the potential score developed from Pender (1987). The details are shown in table 1

Table 1 The level of health practices determined by percentage grouping of the potential score.

Level of practices	Health practices	Nutrition	exercise	Sleep and rest	Stress management	Elimination practices	General responsible for health
Number of items	35	13	5	6	4	3	4
Total score (100%)	0-105	0-39	0-15	0-18	0-12	0-9	0-12
-Poor (< 55%)	< 55.7	< 21.4	< 8.3	< 9.9	< 6.6	< 5.0	< 6.6
-Fair (55-64%)	55.8-67.2	21.5-25.0	8.4-9.6	10-11.5	6.7-7.7	5.1-5.7	6.7-7.7
-Medium (65-74%)	67.3-77.7	25.1-28.9	9.7-11.1	11.6-13.3	7.8-8.9	5.8-6.7	7.8-8.9
-Good (75-84%)	77.8-88.2	29.0-32.8	11.2-12.6	13.4-15.1	9.0-10.1	6.8-7.6	9.0-10.1
-Excellent(> 85%)	>89	>33	>12.7	>15.2	> 10.2	> 7.7	>10.2

Test for validity and reliability

Test for validity.

The content of the questionnaires for menopausal symptoms and health

practices was validated by 5 experts, including two obstetricians, one psychiatric nurse and two obstetric-gynecological nurses.

Test for reliability.

Cronbach's alpha coefficient was computed to test the reliability of the menopausal symptoms questionnaire and the health practices questionnaire. The reliability of the frequency of menopausal symptoms, the severity of menopausal symptoms, and of health practices were 0.9, 0.93, and 0.7 respectively.

Data Collection

Data collection was carried out by interview using the questionnaires as a guide. The steps involved in data collection were;

1. The researcher requested permission from the director of Songkla, Provincial Public Health.
2. The 2 research assistants, who were registered nurses from Chana hospital and able to speak the Yawee language were trained and checked. Interview techniques to gain rapport were emphasized as were the ability to ask sensitive questions such as those dealing with sexual details, in a way to avoid embarrassment.
3. Co-operation with public health volunteers in each district to get address details and access to subjects. Approach each potential subject by giving verbal explanations of the purpose of the study, assuring confidentiality, anonymity and freedom of withdrawal from the study at any time. Verbal consent was obtained from each subject before starting the interview.
4. Interview each subject by reading each statement to the subject and recording their response on the answer sheet.
5. Check for completeness of the data and enter into the data base for statistical

analysis.

Data Analysis

Data was analyzed by using SPSS PC on computer (Statistic Package for the Social Science). The following statistics were used;

1. Descriptive statistics

- 1.1 Demographic data was described in terms of frequency, percentage, range, mean, and standard deviation.

- 1.2 The score obtained from the menopause symptoms questionnaire and health practices questionnaire of middle aged women was described in terms of range, mean, percentage, and standard deviation.

2. Pearson's product- moment correlation coefficient was calculated in order to determine the relationship between menopausal symptoms and health practices among middle aged Thai Muslim women.

3. T-test analysis was used to compare the frequency score of menopausal symptoms, the severity score of menopausal symptoms, and the health practices between pre-perimenopausal subjects and postmenopausal subjects.