

CHAPTER 3

METHODOLOGY

The purposes of this study were: (a) to describe attitudes, subjective norms, and intentions to have cesarean section of Chinese nulliparous women, (b) to compare attitudes and subjective norms between Chinese nulliparous women who intend to have cesarean section and those who do not intend, (c) to examine the relationships between attitudes, subjective norms and intentions to have cesarean section of Chinese nulliparous women. In this chapter, the research design, population and sample, instrumentation, data collection procedure and methods of data analysis are presented.

Design of the study

A descriptive design was used in this study.

Population and sample

The target population of this study were Chinese nulliparous women. The inclusion criteria were:

- (1). Having gestational age ranging from 36-42 weeks.
- (2). Being diagnosed as normal pregnancy without medical and obstetrical complication.

- (3). Being married and living with husband.
- (4). Keeping contacting with her mother and mother-in-law.
- (5). Being able to write and communicate in Chinese.
- (6). Being willing to participate in the study.

The setting of this study was Antenatal Clinic in Obstetrics and Gynecology Hospital of Shanghai Medical University. In 1996, the number of nulliparous women attending the antenatal clinic per month was approximately 200 (Hospital Statistics Department, 1996), according to the formula for determining sample size (Krejcie and Morgan, 1970, cited in Bernard, 1988) (See Appendix D), the estimated sample size was 234. Purposive sampling method was used to select subjects. Nulliparous women who met the criteria of this study would be eligible subjects. Two hundred and thirty-nine subjects were recruited.

Instrumentation

In this study, the instrument was a questionnaire including two parts: (1) The Attitudes, Subjective Norms and Intentions to Have Cesarean Section Questionnaire; (2) The Personal Data Recording Form (See Appendix A). Development of each part of the instrument is presented in the following paragraphs.

Attitudes, Subjective Norms and Intentions to Have Cesarean Section (ASNICS) Questionnaire

The ASNICS Questionnaire was developed by the researcher according to the guidelines described by Ajzen and Fishbein (1980) and the literature review related to cesarean section. It contained 59 self-reported items and consisted of 3 aspects: behavioral intention (1 item), attitude (44 items), and subjective norm (14 items).

(1). Intention to have cesarean section

The single item was used to assess intention to have cesarean section. The women were asked to respond to the statement "I intend to have cesarean section to terminate this pregnancy". The item is rated on a bipolar five point scale with response ranging from extremely likely(+2) to extremely unlikely (-2). The rate of scores are: extremely likely(+2), slightly likely(+1), undecided (0), slightly unlikely(-1), extremely unlikely(-2). The average of intention score was classified into three levels, namely intention (>0), undecided (=0), nonintention (<0). A higher score indicated a stronger intention.

(2). Attitude toward having cesarean section

Attitude toward having cesarean section was measured using the Attitude Questionnaire which consisted of two 22-

item subscales for measuring women's beliefs about the consequences of having cesarean section and their evaluations of these consequences. Behavioral beliefs identified in an extensive review of literature were used as basis for the items in the first subscale. Each behavioral belief item was multiplied by the corresponding outcome evaluation item, then summed and averaged to yield an attitude score. Each item is ranged from -2 to +2 on a bipolar five point scale producing a total composite score ranging from -4 to +4. The average of attitude score was classified into three levels namely positive (>0), neutral ($=0$), and negative (<0). The higher the score, the more positive attitudes toward having cesarean section.

(3). Subjective norm related to having cesarean section

Subjective Norm Questionnaire consisted of two 7-item subscales for tapping women's perceptions of the expectations of significant others for having cesarean section and measuring the women's desire to comply with each of the significant others. Significant others identified in this study derived from the literature as having an influence on women's decision making to have cesarean section were used as the basis for the first subscale. Each of the seven significant others (husband, mother, mother-in-law, good

friend, obstetrician, prenatal educator and mass media) expectation items is multiplied by their respective motivation to comply items, then, summed, and averaged to yield a composite subjective norm score.

The significant others expectation item is ranked from -2 to +2 on a bipolar five-point scale, motivation to comply item is ranged from +1 to +5 on a polar five point scale, producing a total composite score ranging from -10 to +10. The average of subjective norm score was classified into three levels namely supportive (>0), neutral ($=0$), and unsupportive (<0). The higher the score, the more supportive the women perceived that their significant others think they should have cesarean section.

Personal Data Recording Form

Personal Data Recording Form was developed to obtain information pertaining to women's socioeconomic data including age, educational level, family type, family income, health care insurance status; and women's obstetrical information including gravida, para, gestation age, number of abortion (spontaneous or artificial), number of stillbirth, the actual delivery mode to terminate this pregnancy.

Testing for validity and reliability of instruments

The ASNICS Questionnaire and Personal Data Recording Form were originally written in English. The content validity of the English version of the questionnaire had been examined by five nursing instructors in Faculty of Nursing, Chiang Mai University, who had expertise in maternal health and Theory of Reasoned Action (See Appendix C & Appendix I). The questionnaire was rewritten according to nursing experts' suggestions. After that, the questionnaire was translated into Chinese by the researcher. Then, face validity, clarity and readability of the Chinese version had been examined by a master's prepared nursing faculty and an obstetrician of Shanghai Medical University who were good at both English and Chinese. Their suggestions were incorporated.

Reliability of the Chinese version of the ASNICS Questionnaire had been determined before data collection. Fifteen pregnant women who met the inclusion criteria in Antenatal Clinic of Obstetrical and Gynecology Hospital of SMU were selected for testing the reliability of the instrument. Value of Cronbach's coefficient alpha was used to assess the internal consistency of attitudes and subjective norms. Test-retest was used to assess the stability of the single item measuring the intention. The alpha values of attitudes and subjective norms were .92 and .73 respectively, and test-retest value of intentions was .93 which indicated an

acceptable level (more than .70) (Polit & Hungler,1995).

Data collection procedure

The ASNICS Questionnaire and Personal Data Recording Form were collected by the researcher in the antenatal clinic. The obstetrical information of Personal Data Recording Form was obtained from the medical documentation. Data collection was done by the researcher step by step in following:

1. Prior to conducting the study, the study plan and protection of the rights of human subjects were assured by the hospital administrators. Permission of data collection from the hospital's administrators, obstetricians, and nurses in antenatal clinic were obtained.

2. The research purpose and the plan were explained to the obstetricians in the antenatal clinic and the obstetricians were asked to help the researcher identify the potential subjects according to the inclusion criteria.

3. After seeing the obstetrician, the purpose of this study was explained to the potential subject for cooperation and participation and verbal informed consent (See Appendix B) was obtained from each subject.

4. Each subject was instructed how to complete the research instrument. The time for completing the questionnaire ranged from 30 to 45 minutes.

5. During this procedure, the researcher was presented

to provide more information and clarification if required.

Analysis of data

To answer the research questions, data were analyzed using the SPSS computer software package. Descriptive and inferential statistics were used. The level of significance for the study was established at $\alpha=.05$.

1. Personal data were analyzed by using descriptive statistics including frequency, percentage, mean, standard deviation and range.

2. The first, second, and third research questions regarding attitudes, subjective norms, and intentions of nulliparous women were answered by descriptive statistics including frequency, percentage, mean, standard deviation and range.

3. The fourth and fifth research questions regarding the difference in attitudes and subjective norms between the intenders and nonintenders were answered by inferential statistics: independent t-test was used.

4. The sixth and seventh research questions regarding the relationships between the attitudes, subjective norms and intentions were investigated using Pearson's Product Moment Correlation Coefficient. The level of correlation used in this study was based on Pearson's r , that is r equals to .9 to 1.0 means very high correlation; r equals to .7 to .89 means high

correlation; r equals to .5 to .69 means moderate correlation; r equals to .26 to .49 means low correlation, r equals to .00 to .25 means little relationship if any. These categories include + and - rs (Munro, 1997).

5. To answer the eighth research question, multiple regression were used to analyze whether intentions can be predicted by attitudes and subjective norms.

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