#### CHAPTER 5

# CONCLUSIONS, IMPLICATIONS, AND RECOMMENDATIONS

This chapter is organized into three sections: summary of conclusions, implications, and recommendations for further research.

### Summary of the Study

The objectives of study were met by means of an exploratory descriptive research design using a two-phase approach. The study developed instruments for evaluating perceptions of cesarean section, examined the relationship between personal factors and decision making regarding cesarean section, examined the relationship between perceptions of cesarean section and decision making regarding cesarean section, examined the relationship between decision making style and decision making regarding cesarean section, and examined the predictive power of the above decision making factors regarding cesarean section in the absence of medical indications.

A two-phase method was employed. In Phase One, structured individual interviews were conducted with 80 post-cesarean mothers who had no medical indications. Then, the Perceptions of Cesarean Section Questionnaire (POCS) for Phase Two was developed based on data obtained from Phase One. Phase Two was conducted with 434 pregnant women who had more than 32 weeks of gestation age, no history of complications during pregnancy, no medical indication for cesarean

section, and who were not elderly-primigravidarum (age 35 years or over) in prenatal clinics in two hospitals, one government and one private. Data was gathered using a personal date sheet, a decision making style instrument of Scott & Bruce (1995) and perceptions of cesarean section (POCS) instrument which had been validated by six experts with an inter-rater agreement of 0.98 and a Content Validity Index of 0.93. The reliability of the perceptions of cesarean section and decision making style instruments were 0.83 and 0.86, respectively. Construct validity of these two instruments was conducted using Principle Component Factor Analysis. This process yielded for the perceptions of cesarean section, forty-six items were retained which together explained a total of 37.5% of the variance. For decision making style a twenty-five item which explained a total of 51.5% of the variance. Inter-item correlation of the perceptions of cesarean section and decision making style instruments ranged from 0.01 to 0.70 and -0.01 to 0.60 respectively.

### **Results of Analysis**

- 1. Demographic characteristics. Most subjects were between the age of 15 to 24 years, had a high school or better education, were housewives with a family income of under 10,000 Baht/month, paid for their own medical expenses (no health insurance), were nulliparous and lived in urban areas.
- 2. Decision making regarding cesarean section was positively correlated with age, educational level, occupation, family income, health insurance and selection of hospital for prenatal care (p < .05).
- 3. Two perceptions of cesarean section, seriousness and benefits, were related to selection of cesarean section (p < .05). Those who felt a cesarean operation was

less serious were more likely to elect this option as were women who perceived cesarean as giving high levels of benefit.

- 4. Women with low rational decision making style scores were more likely to elect cesarean birth (p < .05).
- 5. Age, educational level, selection of hospital for prenatal care, benefits of POCS and rational DMS can predict Thai pregnant women's decision making regarding C-section in the absence of medical indications (p < .05), with a predictive power of 86.30 %. These factors explained 20.80 % of the variance in decision making. The odds ratio (OR) for those who selected to use a government hospital were 4.73 times higher than pregnant women who selected a private hospital for prenatal care, those who had more than 12 years of schooling were 3.42 times higher than those with less education, pregnant women aged 30 45 years were 2.77 times higher than whose aged 15 29 years, those with high scores on benefits of POCS were 2.36 times higher than those with low scores and pregnant women with low scores of rational DMS were 52% higher than those with higher scores.

#### **Implications and Recommendations**

The findings of this study have identified several factors associated with decision making regarding cesarean section which have implications for nursing practice, nursing education and nursing research.

### **Implications for Nursing Practice**

The results of this study indicate that perceptions of pregnant women (perceived benefits of cesarean section), decision making style (rational decision making style) and personal factors (age, educational level and selection of hospital for prenatal care) can predict decision making regarding cesarean section. This suggests that nurses should be concerned with pregnant women's health perceptions regarding cesarean section and their decision making style. The important role of nurses in this situation could enhance the accuracy of knowledge and further empower pregnant women in their decision making regarding cesarean section. Factors influencing decision making regarding cesarean section should be assessed, followed by specific nursing interventions based on that assessment.

As rational decision making style and perceptions of the benefits of cesarean section are a predictor of birth mode selection, pregnancy counseling clinics and/or group support activities should be established to help prepare women for childbirth so they can make informed, rational decisions on their own. Nurses should provide factual information cesarean section versus vaginal delivery, including the seriousness and benefits of a cesarean operation. In addition, clinics should also prepare the women psychologically for the decision they have made. Parents should be educated on the birth process with, e.g., a video tape and a simulated situation version of labor showing the way to cope with childbirth. Pregnant women should be taught how to release tension, anxiety and fear regarding birth. The empowerment process could include helping women to view mastery of childbirth pain as a worthwhile endeavor and to help prepare them to gain satisfaction from their birth experience. Intervention

should include assessment of antenatal intra-natal and post-natal knowledge and provision of decision making skills practice.

In situations where the pregnant woman has focused excessively on the technical benefits of cesarean birth, the nurse should concentrate on discussion of the supportive, rather than central, role of technology in giving birth.

### **Implications for Nursing Education**

Nursing education agencies responsible for public health and public health education should seek more effective avenues for providing accurate information on the relative benefits and risks of cesarean section birth versus vaginal birth to pregnant women as well as to the general population (including expectant fathers). Areas which should receive special attention include maternal and fetal health risks and health benefits plus the relative costs (including costs of post-partum care). In addition, the birth program should be presented to relevant government regulators to establish appropriate measures to insure fullest participation by women choosing their delivery method in cases of pregnancy without medical complications. Nursing students should be made aware of the risks of health problems arising from cesarean section and subsequent obstetric care. Nurses and midwives should be reinforced in their faith that they can and do make a difference in obstetric care through professional refresher training to update and reinforce their knowledge, ability and self-confidence. This emphasis on awareness and training should be accompanied by an increase in the role and responsibility of midwives in childbirth for cases with no complications. The added contact with nurses and midwives provided by that expanded role would provide additional opportunity for expectant mothers to talk with medical professionals and to have any remaining misconceptions corrected, misconceptions which could otherwise induce mother's to elect cesarean birth unnecessarily.

## Implications for Nursing Research

This study investigated several of the basic factors related to birth mode selection, with emphasis on comparing private and government hospitals. Future studies could investigate differences among hospitals within each of those categories, e.g., to determine what factors result in one private hospital having a significantly lower rater of cesarean births than another. In addition, variation between private hospitals and government hospitals in other parts of Thailand could be studied. Another area worthy of study would be to compare and contrast beliefs regarding birth mode under different contexts, e.g., different socio-economic groups, different ethnic groups, etc.

The replication of use of both POCS and DMS instruments with other groups should be undertaken to further demonstrate their level of validity and reliability, e.g., decision making regarding family planning, methods of hormone replacement, and use of cosmetic medications and procedures.

A growing trend in Thailand is for hospitals to offer birth services as a package at a fixed price. This system protects the patient from potentially high medical bills in case of pregnancy complications. The influence of this new system on the incidence of cesarean birth should be investigated. If and when the

recommendation in this study to institute a system of Private Nursing care, the actual efficacy and socio-psychological impact of that method should be evaluated.

The factors influencing birth mode decision investigated in this should be used to conducted an evaluation of the actual outcome of the decision making process, looking at expected and actual mode of delivery. Other factors in the Health Decision Model with a potential influence on health decision making by pregnant women should be investigated, e.g., relationship between the pregnant women and her physician, the background and beliefs of the physician, the impact of social pressures, and the costs of health care.

#### Limitations of the Study

Some items of the Perceptions of Cesarean Section questionnaires (POCS) were found to be unrelated to some constructs, e.g., items 42, 46, 47. This was the first use of the POCS questionnaires. These questionnaires should be administered to other groups, revised as necessary, and retested for construct validity with other groups of women e.g., post-cesarean women, postpartum women. Some items in the Decision Making Style questionnaires included negative terms which seemed to have confused some statements.