FACTORS ASSOCIATED WITH THE CONTRACEPTIVE USED BY POSTPARTUM WOMEN WITH TWO OR MORE LIVING CHILDREN AT AMNATCHAROEN HOSPITAL

NUNNAPAT PEERANUNRUNGSRI

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……
Mrs. Nunnapat Peeranunrungsri
Candidate

……
Asst.Prof.Sanya Patrachai,
M.D., Dip. Thai Board of Ob.& Gyn.,
M.P.H.
Major-Advisor

……
Asst.Prof.Jittima Manonai,
M.D., Dip. Thai Board of Ob.& Gyn.,
Co-Advisor

……
Assoc.Prof.Vajira Singhakajen,
B.A.(Stat.), LL.B., M.A. (Demog.)
Co-Advisor

……
Assoc.Prof.Rassmidara Hoonsawat,
Ph.D.
Dean
Faculty of Graduate Studies.

……
Assoc.Prof.Somsak Suthutvoravut,
M.D.,Dip.Thai Board of Ob.&Gyn.,
Dip.in Field Epidemiology (C.D.C.)
Chair
Master of science Programme in Human Reproduction and Population Planning
Faculty of Medicine
Ramathibodi Hospital

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on
December 23,2003

……
Mrs. Nunnapat Peeranunrungsri
Candidate

……
Asst.Prof.Sanya Patrachai,
M.D., Dip.Thai Board of Ob.& Gyn.,
M.P.H.
Chair

……
Asst.Prof.Jittima Manonai,
M.D., Dip. Thai Board of Ob.& Gyn.,
Member

……
Prof.Surasak Taneepanichskul
M.D.,Dip.Thai Board of Ob.& Gyn.,
Dip.Thai Board of Preventive Medicine
Member

……
Assoc.Prof.Vajira Singhakajen,
B.A.(Stat.), LL.B., M.A. (Demog.)
Member

……
Assoc.Prof.Rassmidara Hoonsawat,
Ph.D.
Dean
Faculty of Graduate Studies.
Mahidol University

……
Prof.Prakit Vathesatogkit,
M.D.,ABIM, FRCP
Dean
Faculty of Medicine
Ramathibodi Hospital
Mahidol University

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Nunnapat peeranunrungsri

FACTORS ASSOCIATED WITH THE CONTRACEPTIVE USED BY POSTPARTUM WOMEN WITH TWO OR MORE LIVING CHILDREN AT AMNATCHAROEN HOSPITAL

NUNNAPAT PEERANUNRUNGSRI 4436380 RAHP/M

M.Sc. (HUMAN REPRODUCTION AND POPULATION PLANNING)

THESIS ADVISORS : SANYA PATRACHAI, M.D., M.P.H., JITTIMA MANONAI, M.D.,VAJIRA SINGHAKAJEN, B.A., (STAT.) LL.B., M.A. (DEMOG.)

ABSTRACT

The present research was a cross-sectional study investigated predisposing factors, enabling factors, and reinforcing factors, as well as the factors affecting the postpartum subjects' choice of birth control after having at least two children at Amnajcharoen Hospital. The subjects were 290 postpartum mothers who were recovering within 24 hours after childbirth at the maternity and special maternity wards of Amnajcharoen Hospital, Amnajcharoen Province, during February 16 to April 30, 2003. Among these subjects, 90 or 31% chose to have permanent birth control, while 196 or 67.6% chose temporary birth control. There were four subjects, or 1.4%, who did not choose any means of birth control. Data were analyzed using descriptive statistics of percentage, mean, and standard deviation. In addition, Chi-square test, Pearson's Contingency Coefficient , and discriminant analysis were used to determine the factors affecting choice of birth control.

The study showed that the predisposing factors which were statistically significantly associated with the choice of birth control of the female subjects with at least two living children were age, occupation, family income, ideal number of children, knowledge about birth control, and beliefs in rumors. The reinforcing factor with such association was support from the husbands. The individual variable with the highest predicting power affecting the female subjects' choice of permanent or temporary birth control was the husbands' support, which was followed by knowledge about birth control, age, and beliefs in rumors, all of which accounted for 74.1% of the total variance.

The findings of this research could be used as a guideline in developing hospital administration at Amnajcharoen Hospital to choose a more effective means of birth control methods of postpartum mothers.

KEY WORDS : CONTRACEPTIVE / POSTPARTUM WOMEN / SURGICAL STERILIZATION

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ปัจจัยที่มีความสัมพันธ์กับการเลือกใช้วิธีคุมกำเนิดของสตรีหลังคลอดที่มีบุตรมีชีวิต 2 คน ขึ้นไป ที่ ร.พ.อำนาจเจริญ (FACTORS ASSOCIATED WITH THE CONTRACEPTIVE USED BY POSTPARTUM WOMEN WITH TWO OR MORE LIVING CHILDREN AT AMNATCHAROEN HOSPITAL)

นันท์นภัส พีระนันท์รังษี 4436380 RAHP/M

วท.ม. (การเจริญพันธุ์และวางแผนประชากร)

คณะกรรมการควบคุมวิทยานิพนธ์ : สัญญา ภัทราชัย, พ.บ., M.P.H., จิตติมา มโนนัย, พ.บ., วชิระ สิงหะคเชนทร์, สค.ม.(ประชากรศาสตร์).

บทคัดย่อ

การวิจัยครั้งนี้เป็นการศึกษาแบบ Cross-sectional study โดยมีวัตถุประสงค์เพื่อศึกษาถึงลักษณะทางปัจจัยนำ ปัจจัยเอื้ออำนวย ปัจจัยเสริมแรง ที่มีความสัมพันธ์ กับการเลือกใช้วิธีคุมกำเนิดของสตรีหลังคลอดที่มีบุตรมีชีวิต 2 คนขึ้นไป ที่โรงพยาบาลอำนาจเจริญ ระหว่างวันที่ 16 กุมภาพันธ์ ถึง วันที่ 30 เมษายน 2546 จำนวน 290 ราย โดยเป็นสตรีที่เลือกคุมกำเนิดชั่วคราว 196 ราย เป็นสตรีที่เลือกคุมกำเนิดถาวร 90 ราย และไม่คุมกำเนิด 4 ราย วิเคราะห์ข้อมูลโดยใช้สถิติ ร้อยละ ค่าเฉลี่ย ส่วนเบี่ยงเบนมาตรฐาน Chi – square test และสถิติวิเคราะห์จำแนกกลุ่ม (Discriminant analysis) โดยใช้วิธีแบบขั้นตอน (Stepwise method)

ผลการวิจัยพบว่า ปัจจัยที่มีความสัมพันธ์กับการเลือกใช้วิธีคุมกำเนิดของสตรีหลังคลอดที่มีบุตรมีชีวิต 2 คนขึ้นไป ได้แก่ อายุของสตรี อาชีพของสตรี รายได้ของครอบครัว จำนวนบุตรที่ต้องการ ความรู้เกี่ยวกับการคุมกำเนิด ความเชื่อในข่าวลือ และการสนับสนุนของสามี เมื่อนำตัวแปรที่ศึกษาทั้งหมดเข้าสมการจำแนกกลุ่ม พบว่า ตัวแปรที่สามารถทำนายการเลือกใช้วิธีคุมกำเนิดได้ดีที่สุด คือ การสนับสนุนของสามี รองลงมาได้แก่ ความรู้เกี่ยวกับการคุมกำเนิด อายุของสตรี และ ความเชื่อในข่าวลือ และสมการจำแนกกลุ่มสามารถคาดคะเนการเป็นสมาชิกของกลุ่มที่เลือกคุมกำเนิดชั่วคราวและเลือกคุมกำเนิดถาวร ได้ถูกต้อง ร้อยละ 74.1

จากการศึกษานี้ ทำให้ทราบลักษณะต่าง ๆ ตลอดจนรูปแบบการคุมกำเนิดของสตรีหลังคลอด ที่มีบุตรมีชีวิต 2 คนขึ้นไป และปัจจัยที่มีความสัมพันธ์กับการเลือกใช้วิธีคุมกำเนิด ซึ่งสามารถนำไปประยุกต์ใช้ในการวางแผนดำเนินงานวางแผนครอบครัวที่โรงพยาบาลอำนาจเจริญ เพื่อส่งเสริมให้มีผู้รับบริการคุมกำเนิดที่มีประสิทธิภาพมากยิ่งขึ้น

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CHAPTER I
INTRODUCTION

Background and significance of the study

One cause of an increase in the world population since the second half of the twentieth century is the advance in medical science and public healthcare, decreasing the mortality rate and increasing the number of the total population. This is considered an important problem most developing countries are currently facing. If the increase in the world population is not proportionate with the availability of natural resources, problems in every aspect of development can result such as educational development, development in public health and welfare, lack of food sources and living space, polluted environment, occurrence of slum communities, unemployment, crime, drug abuses, and prostitution, etc. In order to develop a country to reach its developmental goals, both quality and quantity of human recourses are deemed important. If there are too many people in a country, they can become burdens on individuals, families, communities, and the country itself. For this reason, every country has been trying to control the number of its population to maximize the country's development potential.

In the past, the pattern of population increase in Thailand was similar to that of other developing countries. That is, the mortality rate decreased rapidly, while the birth rate increased slowly; thus, the number of population rose so high that the government had to declare a population policy in 1970, emphasizing the significance of family planning, an important activity to solve the population problems which was seen as a major obstacle in the nation's social and economic development. As a result of the government's attempt, during the past 20 years of family planning policy, the rate of population growth was reduced from 3.2% in 1970 to 0.8% in 2001 (1).

Therefore, it could be stated that Thailand has been successful in decreasing the rate of population growth. This is considered a demographic revolution which generally takes 100 years or longer as it did in Japan or western European countries. However, the process took only 20 to 30 years in Thailand (2). Even media in other countries have mentioned this success of Thailand. For example, *Popline Journal*

cites an institute in Washington DC stating that Thailand is one of the countries which have successful family planning, able to decrease the population growth by making people prefer to have fewer children. The journal further describes that a preferable economic growth of Thailand results from the country's ability to rapidly and continuously reduce the population growth rate. Unsurprisingly, successful family planning of Thailand is always mentioned and praised in international conferences (3).

However, highly regarded evidence indicating Thailand's successful family planning policy does not mean that the country should no longer continue or reduce its effort to promote family planning among its citizens. There are various reasons for this as follows:

1. Due to a high reproduction rate in the past, a lot of children who were born during that time have become adults in their reproductive stage at present. The number of married reproductive females rose from 1.6 millions in 1987 to 8.7 millions in 1996. This clearly indicates that the target group of family planning operation has to be expanded (4). Thus, promotion of family planning has to be carried out

continuously to maintain the population growth rate to match the country's ability to develop the population appropriately.

2. When considering the success of family planning, the overall national mean cannot be used as an indicator of a true success. Details in each region, province, and even district of the whole country should be taken into account if possible to see the actual differences. In fact, family planning in some regions of the country does not reach the goal set. According to the assessment of the family healthcare in the Eight National Economic and Social Development Plan, by the end of the plan in 2001, the rate of family planning in Thailand was equal to 75.1%, which was lower than the goal set at 77%. In the northern and central regions, the rates were equal to 81.5% and 79.5%, respectively, which were higher than the goal. However, in the southern region, northeastern region, and Bangkok, the rates were 64.7%, 73.6%, and 70.1%, respectively, all of which were lower than the goal (5).

Due to these reasons, it could be concluded that the family planning policy of Thailand continues to be important and that it needs to be carried out consistently. Also, the government needs to seek new measures to make all regions of the country become successful in carry out the family planning policy.

Family planning is health and social services provided to the citizen by the government. The willingness of the service receivers is deemed essential in service provision so as to enable them to receive needed services as planned. It is also vital those included as the target group recognize the significance of family planning and decide the size of their own family. Thus, to increase the effectiveness of family planning activities to reach the goal of family planning, the population who should be willing to embrace family planning services most must be targeted; that is, postpartum mothers. Postpartum mothers should be convinced to have birth control because they are directly affected both physically and mentally. In other words, as they have recently given birth, they should have the highest motivation to have birth control before having the next child (6).

Temporary birth control is most appropriate for married couples who are not ready to have a child or those who want to wait before having another child. As for the couples who do not need to have any more children, permanent birth control is

necessary as it can prevent conception until the mothers pass their reproductive age. It is also more effective and cheaper than any other means (7).

For married couples who have more than two children and do not need to have more children but still use temporary birth control, they are at risk of unwanted pregnancy. If that occurs, they would have more children than they want, and the newborn may not be welcome by their parents. These babies will grow up feeling unloved and insecure, and they may cause social problems such as drug abuse and violence. It has been found that a large number of mothers deal with unwanted pregnancy by having an abortion, even though it is difficult to specify the exact number. Abortion, especially illegal abortion, have many adverse effects including complications, health risks, hospitalization, or even death, making the country lose productive manpower necessary for its development.

Amnajcharoen Hospital provides all aspects of female healthcare. It also emphasizes the significance of mother and child's health as evidenced by its provision of neonatal services provided to mothers as soon as they become pregnant and continued until delivery. After childbirth, the hospital provides a variety of postpartum services such as check-ups and birth control. With the help of the hospital, the mothers can choose birth control methods most appropriate to them to ensure their babies' and their own health, which in turn affects the economic and social status of them.

A study of the registration records of postpartum service receivers and the registration records of family planning service receivers at Amnajcharoen Hospital has revealed that in the fiscal year 2002, there were 1,931 postpartum mothers who had more than two children. Of these, only 488, or 25.27% (8), chose to have a surgical sterilization , which was considered a very low rate.

When considering the efficiency and effectiveness of permanent sterility, it is interesting to study factors related to the decision of postpartum mothers with two living children or more to undergo a sterility operation. It is expected that the findings would yield insightful information which can be utilized in planning and improving family planning services of the hospital as well as in conducting further research to shed more light on the issue.

General objective

To study the birth control methods of postpartum mothers with two or more living children at Amnajcharoen Hospital

Specific objectives

1. To study general demographic characteristics of postpartum mothers with two or more living children at Amnajcharoen Hospital
2. To study the rate and choice of birth controls among postpartum mothers receiving services at Amnajcharoen Hospital
3. To investigate the relationships of predisposing factors, enabling factors, and reinforcing factors and choice of birth control methods of postpartum mothers with two or more living children at Amnajcharoen Hospital
4. To examine factors influencing choice of birth control methods of postpartum mothers with two or more living children at Amnajcharoen Hospital.

Research hypotheses

1. Predisposing factors consist of demographic characteristics, and the components of predisposing factors are associated with choice of birth control methods of postpartum mothers with two or more living children at Amnajcharoen Hospital.
2. Enabling factor, which refers to satisfaction with birth control provision facilities, is associated with choice of birth control methods of postpartum mothers with two or more living children at Amnajcharoen Hospital.
3. Reinforcing factor, or support of involved persons, is related to choice of birth control methods of postpartum mothers with two or more living children.

Scope of the study

The present study will be conducted with postpartum mothers with live births and with two or more living children who use services provided at Amnajcharoen Hospital.

Study variables

In this study, there are eleven independent variables as follows:

1. Postpartum mothers' age
2. Postpartum mothers' occupation
3. Postpartum mothers' educational level
4. Family income
5. The ideal number of children
6. The number of living children
7. Knowledge on birth control
8. Belief in rumors
9. Experience in birth control
10. Satisfaction with birth control facilities
11. Support of involved persons

As for the dependent variable, there is only one dependent variable; that is, choice of the following birth control methods:

-Temporary birth controls such as contraceptive pills, contraceptive injection, use of IUD, use of condom, pulling out before ejaculation, counting the safety period, etc.

-Permanent birth controls which are either female sterilization or vasectomy.

Definition of terms

"Age of postpartum mothers" means the full years of age of postpartum mothers on the day they gave birth.

"Occupation of postpartum mothers" means the type of work they did while participating in the study.

"Educational level of postpartum mothers" means the highest level of education attained by postpartum mothers.

"Family income" means the total amount of income earned by postpartum mothers and their husbands as assessed by postpartum mothers.

"The ideal number of children" means the number of children postpartum mothers wanted to have regardless of the actual number of children they had which could be higher or lower.

"The actual number of children" means the number of children postpartum mothers had during their participation in the present study including the newborn and regardless of who the children were living with.

"Knowledge of birth control" means the correct knowledge of postpartum mothers regarding birth control as assessed by the rating of the constructed questionnaire.

"Beliefs in rumors" means correct beliefs regarding birth control as assessed by the rating of the constructed questionnaire.

"Experience in birth control methods" means postpartum mothers' use or lack of use of at least one method of birth control prior to their latest pregnancy.

"Satisfaction with birth control facilities" means postpartum mothers' feeing of satisfaction with the birth control services they received.

"Support from involved persons" means support from postpartum mothers' husbands, parents, siblings, relatives, or medical personnel regarding selection of birth control methods as considered from the support from the most important persons to postpartum mothers or postpartum mothers' own opinions.

"Choice of birth control methods" means postpartum mothers' planned prevention of conception and pregnancy after delivery which could be divided into temporary birth control and permanent birth control.

CHAPTER II
LITERATURE REVIEW

In this chapter, relevant theories and related research regarding different factors that influence the choice of birth control methods of postpartum mothers with two or more living children are reviewed under two topics:

1. Concepts and theories used in research, and
2. Relevant research.

Concepts and theories used in research

Health behavior (9) is defined as an act or a practice of individuals which aims at achieving good health and preventing diseases. Birth control is considered one health behavior. This is because birth control, regardless of the methods used, is prevention of having a child when the married couples are not physically, mentally, economically, or socially ready or when the married couples already have enough children. Thus, birth control can help married couples avoid difficulties in life caused by having more children.

Behaviorists have attempted to find reasons to explain how a behavior of individuals take place. Numerous behavioral concepts, theories, and assumptions have been thought of, which can be briefly summarized as follows (10):

First, Intra-individual Causal Assumption is based on an initial assumption that causes of behaviors or factors influencing behaviors come from within individuals; that is, knowledge, attitudes, beliefs, values, motivations, etc.

Second, Extra-individual Causal Assumption's fundamental assumption is that causes of behaviors come from external factors of individuals such as political systems, economy, education, religion, demographic component, and geographical characteristics, etc.

Thirdly, Multiple Causal Assumption is derived from an assumption that individuals' behaviors are caused by both internal and external factors. This assumption involves application of psychological, psychosocial, social, and demographic theories to analyze the causes of individuals' behaviors. Behaviorists have explored health behavioral patterns and summarized factors influencing individuals' health behaviors as follows:

1. Accessibility to public health services
2. Assessment of efficiency of public health services
3. Outlooks on disease symptoms, severity, and risks
4. Social components and social networks
5. Knowledge
6. Demographic components

Lawrence W. Green et al. (11) have applied the third assumption and developed a conceptual framework used in analyzing different factors which influence behaviors of individuals. This framework is called the "precede framework," and it maintains that individuals' behaviors are caused by multiple factors. They further specify the analytical process and operational process which consist of seven steps as follows:

Step 1: This step involves an analysis of quality of life by assessing different problems of the citizens such as unemployment, crime, overcrowding, etc.

Step 2: This step classifies which quality of life problems in step one is associated with health.

Step 3: This step analyzes which health problems result from behavior causes and which result from nonbehavior causes.

Step 4: This step analyzes factors which have an influence on behaviors by categorizing the factors into three types:

-Predisposing factors

-Enabling factors

-Reinforcing factors

Step 5: This step is an attempt to find means or strategies to cause changes in different factors to achieve desired behaviors.

Step 6: This step involves an analysis of different project administrations before actual implementation to analyze resources needed in the operation, time, capability of operators, and other factors so as to reach the goal of the operation.

Step 7: This step is an evaluation which involves all of the preceding steps. Indices and evaluation criteria need to be determined in advance.

In the present study, step 4 is used as a fundamental conceptual framework to study factors which are associated with postpartum mothers' behavior in choosing birth control methods including predisposing factors, enabling factors, and reinforcing factors as follows:

1. Predisposing factors refer to factors which are bases and causes of the motivation to adopt the behavior. In other words, predisposing factors are individuals' preferences which come from educational experience. Such preferences can either support or hinder behavior depending on individuals. Predisposing factors include knowledge, beliefs, values, and attitudes, all of which vary depending on demographic factors such as age, gender, economic and social status, and family size. Thus, demographic factors are also considered components of predisposing factors (11).

2. Enabling factors refer to essential resources necessary in individuals' behaviors as well as skills which enable individuals to show such behaviors and to make use of available resources. Enabling factors include price, distance, time, accessibility of services, experiences, etc., which are external factors of individuals.

3. Reinforcing factors refer to feedbacks or outcomes individuals receive or expect to receive from their behaviors, which can either promote or hinder health behaviors including rewards, gains, and punishments individuals receive from influential people in their lives such as spouses, relatives, friends, and healthcare team

members, all of which are considered external factors, as well as influences of their surrounding such as law, regulations, etc.

Women's birth control is considered a health behavior which is determined by various factors. Witoon Osathanont (12) explains motivations leading married couples to birth control as follows:

1. Drives from individuals' own needs
2. Drives from groups or societies
3. Drives developed by individuals

These drives cause individuals to feel the need to make changes. For example, they may make individuals want to have not many children, or they may make individuals to have a lot of children depending on their knowledge, understanding, beliefs, etc. In addition, he further elaborates on the adoption process which is a complicated and continuous process taking place in the human brain in the following sequence: awareness → interest → evaluation → implementation → adoption:

Phase 1, Awareness, is an initial phase in which new things are learned from different sources such as words of mouth or advertisements, but not in detail.

Phase 2, Interest, continues from the first phase. Once interest is developed, numerous processes take place in the brain. For instance, individuals may seek more information for better understanding by using various means such as reading, observing, asking questions, and evaluating the attained knowledge appropriate to their condition before going into the next phase.

Phase 3, Evaluation or Decision to Try, occurs after individuals have studied the available information to their satisfaction. During this phase, they evaluate the information and decide whether they would try it out or not and what they would do if problems occur. They may seek further information such as by asking friends who have similar experiences, studying solutions, and considering good points and weak points until they have sufficient understanding. For some individuals, this phase could last longer than others. After this, the trial phase would begin.

Phase 4, Trial or Implementation, involves actual implementation of new knowledge after thorough consideration and evaluation have been made in the previous phase. If the outcomes of the trial are preferable, individuals would continue the practice; if the outcomes are undesirable, the practice would be discontinued.

However, if individuals still have interests, they may repeat the evaluation phase and trial phase again.

Phase 5, Adoption, occurs only after individuals have successful trial or implementation.

According to these concepts, it can be seen that there are many factors which influence married couples' decision to use a birth control method such as demographic, economic, social, cultural, and psychological factors. These factors are interrelated, and married couples need to consider advantages and disadvantages of each of the birth control methods before making their decision.

In the present research, different concepts and theories are applied to investigate the following factors:

1. Predisposing factors refer to postpartum mothers' age, occupation, educational level, family income, ideal number of children, actual number of children, knowledge on birth control, beliefs in rumors, and experiences in birth control, all of which are factors influencing postpartum mothers' decision to use a birth control method.

2. Enabling factors refer to postpartum mothers' satisfaction with birth control facilities. As the present study was conducted with the postpartum mothers living in a city, where there are numerous facilities available, only the satisfaction with the facilities was examined. This is because such satisfaction can be considered a positive factor facilitating postpartum mothers' decision to perform birth control.

3. Reinforcing factors refer to support from involved persons such as husbands, parents, relatives, friends, or medical staff which made postpartum mothers feel confident in using such a birth control method.

Related research

As for predisposing factors, the following variables are studied:

1. Age

Age is a determinant of physiological readiness affecting reproduction (13). Previous studies have discovered that age is associated with birth control methods as

younger females tend to choose temporary birth controls, whereas older females tend to use permanent birth controls.

Yuwadee Witayapan (14) examined risk factors associated with the decision to have a sterility operation after delivery of postpartum mothers with two or more living children and with sufficient children at Ramathibodi Hospital in 1995. The findings revealed that the average age of females undergoing sterility operation was 32.25 years, while that of females deciding not to undergo the operation was 30.67 years. Age was also found to be statistically significantly related to these females' decision at the .05 level.

Anna Wongkularp (15) investigated factors associated with birth control methods of postpartum mothers at Ramathibodi Hospital in 1994. She found that the average age of females opting for permanent birth control was 32.5 years, while that of females choosing temporary birth control was 27.0 years. It was also discovered that age was positively associated with permanent birth control.

Thus, it could be seen that the females who choose permanent birth control tend to be older than those who opt for temporary birth control and that age of the females is positively correlated with birth control methods.

2.Occupation

Occupation is another factor affecting birth control methods because at present females have to be more responsible for financial well-being of the family due to changes in economic and social patterns. Females have more chances to work outside the house, so they have more access to information including information regarding birth control. In addition, different occupations mean different appropriateness in choosing a birth control method.

Somsamai Marak (16) conducted a study on factors influencing the decision to undergo a sterility operation of postpartum mothers with two or more children at Kanchanaburi Hospital. The results indicated that 38.5% and 33.1% of the subjects were agriculturists and employees, respectively. The results also revealed that the largest group of subjects who decided not to have an operation, or 40.6%, worked in the field of agriculture.

Suwattana Wibulseth and Pichit Pitakthepsombat (17) examined factors influencing the decision to undergo sterility operation of married couples living in the northeastern part of the country. The findings suggested that the husbands' occupation hardly affected the decision, while the wives' occupation had a great effect on the decision. That is, 42.6% of the wives who did not work in agriculture underwent the operation, whereas 38.2% of the wives who were agriculturists did.

Pichit Pitakthepsombat and Suwattana Wibulseth (18) explored examined factors influencing the decision to undergo sterility operation of married couples living in the southern part of the country in 1988. They found that females' occupation clearly affected the decision to have a sterility operation. Only a quarter of those in agriculture underwent the operation, while 34.8% of those who were not agriculturists did.

Therefore, it could be seen that females who were not agriculturists undergo a sterility operation more than those who work in agriculture. This may be because in an agricultural society, there is always a constant need for labor. Consequently, having a lot of children is not seen as an obstacle in work.

3.Educational level

Education is another factor which influences behaviors. It facilitates and broadens the scope of learning, making individuals educated, thoughtful, and able to use reasons in making decision. Besides, educated individuals then to adopt modern values and have more opportunity to gain access to information. Thus, education should be one factor which influences females' choice of birth control as it is associated with knowledge in and acceptance of birth control methods.

Wilailuck Pariyachatkul (7) found that females' educational level has a positive influence on their choice of birth control. That is, females with higher levels of education tend to choose permanent birth control than those who have lower levels of education.

Anongnit Trongwattanawut (19) studied social characteristics and discovered that the educational level of females undergoing a sterility operation is associated with the decision to have an operation after having two or more children. Put another way,

more educated females decided to have a sterility operation than those who were not highly educated.

Wimolrat Phuphasuk (20) examined factors affecting the method and duration of birth control of postpartum mothers in 1989. The findings revealed that among females who completed Grade 4 in elementary school or lower, the proportion of lack of birth control was higher than that among females who were more highly educated. That is, the higher the education, the larger proportion of uses of various birth control methods.

These studies suggest that the educational level of females tends to be associated with knowledge and understanding of efficiency and effectiveness of birth control methods. As a consequence, highly educated females tend to choose birth control methods more appropriately than those who have lower levels of education.

4. Family income

Family income or economic status of the family is a determinant of financial resources available for childrearing such as childcare expenses and education as well as household expenses and utilities (21). Married couples tend to limit the number of their children in accordance with their family income by choosing appropriate birth control methods. Thus, income is associated with birth control.

Thongchai Mankong (22) investigated the relationship between economic and social factors and acceptance of sterility operation among factory workers and found that the average income of these workers was 2,778 baht per month and that family income was associated with acceptance of sterility operation. In particular, those with lower income tended to accept more temporary birth control, while those with higher income tend to choose permanent birth control.

Renu Changpook (23) found that family income was associated with the decision to use IUD as a means of birth control with statistical significance. Females from a low income family tended to used more IUD than those from a high income family. Furthermore, when compared with other means of birth control, it was found that the income of females who chose IUD tended to be lower than that of females who used other temporary birth control methods. She explained that having more children was seen as adding burdens to the family with considerable expenses, so

females with low income chose IUD because its effect was long-lasting and it was cheap.

As a result, it could be seen that family income was associated with both temporary and permanent birth controls.

5. The ideal number of children

The ideal number of children is considered another factor which affects married couples' decision to perform birth control. In general, married couples decide on the size of the family—how many children they want to have—to suit their economic and social status. Thus, when married couples have as many children as they want, they decide to perform birth control to avoid having unwanted pregnancy.

Anongnit Trongwatanawut (19) explored certain characteristics of females who underwent sterility operation after having two children in Sakolnakorn Province in 1989. The results revealed that those who had the ideal number of children of two accounted for the highest percentage of undergoing sterility operation, or 58.4%. In addition, 92.2% of those whose ideal number of children was four or more would underwent sterility operation after having more than three children. The findings also indicated that the ideal number of children was statistically significantly associated with sterility operation.

Thus, it could be concluded that the ideal number of children was an influential factor affecting birth control methods of females. Females who want to have a small number of children tend to use more permanent birth control after reaching the ideal number than those who want to have a lot of children.

6. The number of living children

The number of living children is one variable which helps married couples make a decision whether to continue having children or not. In other words, the number of living children affects the married couples' decision to use permanent or temporary birth control.

Somsamai Marak (16) pointed out that the number of living children affected the postpartum mothers' decision to undergo sterility operation after delivery. The

mothers who had more living children tended to decide to undergo the operation than those who had fewer living children.

Wilailuck Pariyachatkul (7) investigated factors influencing the choice of either permanent or temporary birth control among postpartum mothers with two or more living children at the Health Promotion Center, District 6, Nakhonsawan Province, in 1991-1992. The findings suggested that the number of living children had a positive influence on the mothers' birth control methods. That is, females who had more living children tended to opt for permanent birth control than those with fewer living children.

These studies led to a conclusion that the number of living children is associated with birth control. The more living children, the more likelihood of permanent birth control.

7. Knowledge about birth control

Females or married couples who have more correct knowledge of birth control should have favorable attitudes and practices of birth control than those with less knowledge. Thus, they are able to choose birth control methods more appropriate to themselves.

Somsamai Marak (16) found that knowledge on sterility operation was associated with decision to undergo the operation after child delivery. In general, postpartum mothers who decided to have the operation were more knowledgeable than those who did not have such a decision.

Achara Masmalai (24) investigated factors influencing methods of birth controls among females who did not want more children living in Thailand in 1989. The study results suggested that knowledge on birth control was related to both permanent and temporary birth controls with statistical significance. The females who were knowledgeable about permanent birth control would choose permanent birth control, while those with no such knowledge would completely avoid having permanent birth control.

These studies indicated that knowledge on birth control was associated with the decision to have the sterility operation.

8. Beliefs in rumors

Generally, individuals would decide to have a certain behavior when they have a positive appraisal of such behavior. Thus, females would use the birth control methods they believe are beneficial and appropriate for them. On the contrary, if they believe that certain birth control methods are dangerous to them, or have an effect on their economic and social status, they would not choose such methods.

Saisuthee Suntranont (25) carried out a study to examine fear caused by rumors about complications of male sterility operation. The findings revealed that fear caused by rumors was associated with male sterility operation. In other words, males who were not afraid of rumors would undergo more sterility operation than those who had fear.

Somsamai Marak (16) also found that beliefs in rumors were associated with the decision to have a sterility operation after delivery. She found that 68.1% of the postpartum mothers who underwent a sterility operation had the lowest level of beliefs in rumors, and the decision to have the operation was reduced when the beliefs in rumors increased.

Thus, beliefs seem to associate with sterility operation. Individuals who have correct understanding about the procedure or who have low levels of beliefs in rumors tend to have more sterility operation than those who lack correct understanding or were overwhelmed with fear caused by rumors.

9. Experience in birth control

Experience in birth control is another variable which influences the choice of appropriate and effective birth control methods. Experience in birth control enables individuals to understand good points and weak points of the selected methods, leading to a reconsideration of what is better or more appropriate to use the next time.

Anongnit Trongwatanawut (19) studied a relationship between birth control characteristics after marriage and sterility operation. According to this study, 69% of those who used birth control after getting married would undergo a sterility operation after having two children. In contrast, only 29.8% of those who did not have birth control after getting married underwent a sterility operation after having two or three children.

In brief, experience in birth control is associated with sterility operation as those who used to have birth control after getting married tend to have more sterility operation than those who do not practice birth control at all.

Enabling factor to be studied in the present research is as follows:

10. Satisfaction with birth control facilities

The decision of postpartum mothers to choose birth control facilities should be associated with convenience in traveling, services provided, time, and expenses.

Mali Savananonchai (26) examined statistics regarding distribution of and accessibility to family planning in Thailand in 1987. An examination of determinants and outcomes of birth control patterns in Thailand revealed that convenience in traveling to facilities where services were provided was one important determinant of distribution of and accessibility to family planning services. Simply put, the more convenience service receivers had in traveling to the facility to seek services, the more likely they would seek such services.

Anna Wongkularb (15) studied factors related to choice of birth control methods of postpartum mothers at Ramathibodi Hospital in 1993 and discovered that satisfaction with facilities where services were provided was correlated with choice of birth control method with statistical significance.

Reinforcing factor to be included in the present study is as follows:

11. Support from involved persons

Involved persons refer to postpartum mothers' husbands, relatives, friends, and healthcare providers, all of whom can have an influence over the mothers' choice of birth control method as follows:

Husbands: Husbands are the closest persons to postpartum mothers, so they are a major supporting force which makes the postpartum mothers confident in making a decision. Moreover, in actual practice, the Ministry of Public Health has imposed a regulation regarding sterility operation that the husbands' written consent needs to be obtained, with physicians or other healthcare personnel as witnesses, before the operation begins. Thus, the husbands' opinions can be very influential on the postpartum mothers' decision.

Relatives or friends: Relatives and friends tend to be cooperative and willing to give different advice regarding certain behaviors. Supportive relatives may provide postpartum mothers with mental support, facilities, information, and ideas, especially those who are about the same age as the postpartum mothers or peer group. If members of the peer group have undergone the operation before, they tend to encourage the postpartum mothers to have similar experiences more (27).

Healthcare providers: Healthcare providers can have an influence on the postpartum mothers' choice of birth control methods because they have direct responsibility for providing birth control services as well as other direct and indirect suggestions and recommendations on healthcare. Their characteristics, personality, gesture, and means of information provision can lead to acceptance and use of one birth control method over the others.

Pichit Pitakthepsombat and Suwattana Wibulseth (18) pointed out that 85% of the individuals who underwent a sterility operation had consulted with their spouses before receiving such service, and 85.7% of the spouses supported their decision.

According to Nanta Kongnanta (28), husbands' opinion is the most influential positive factor for postpartum mothers who underwent a sterility operation after child delivery. In particular, 97.1% of the women who received support from their husbands underwent a sterility operation, whereas only 14.6% of those who did not receive such support from their spouses went through with the operation.

Finally, Sujit Meemongkolkuldilok (29) investigated factors associated with 282 women's decision not to receive the interval tubal resection as scheduled at the Family Planning Facility, Siriraj Hospital. The findings revealed that 60% of the women whose husbands provided support came to receive the service, while only 16.4% of those who did not receive support from their husbands sought the service. A statistical analysis also confirmed a relationship between the husbands' attitudes and the women's decision to have a sterility operation.

A review of relevant literature and related existing research points out that there are various factors—predisposing factors, enabling factors, and reinforcing factors—which can be associated with postpartum mothers' choice of birth control methods as shown in the conceptual framework of the present study:

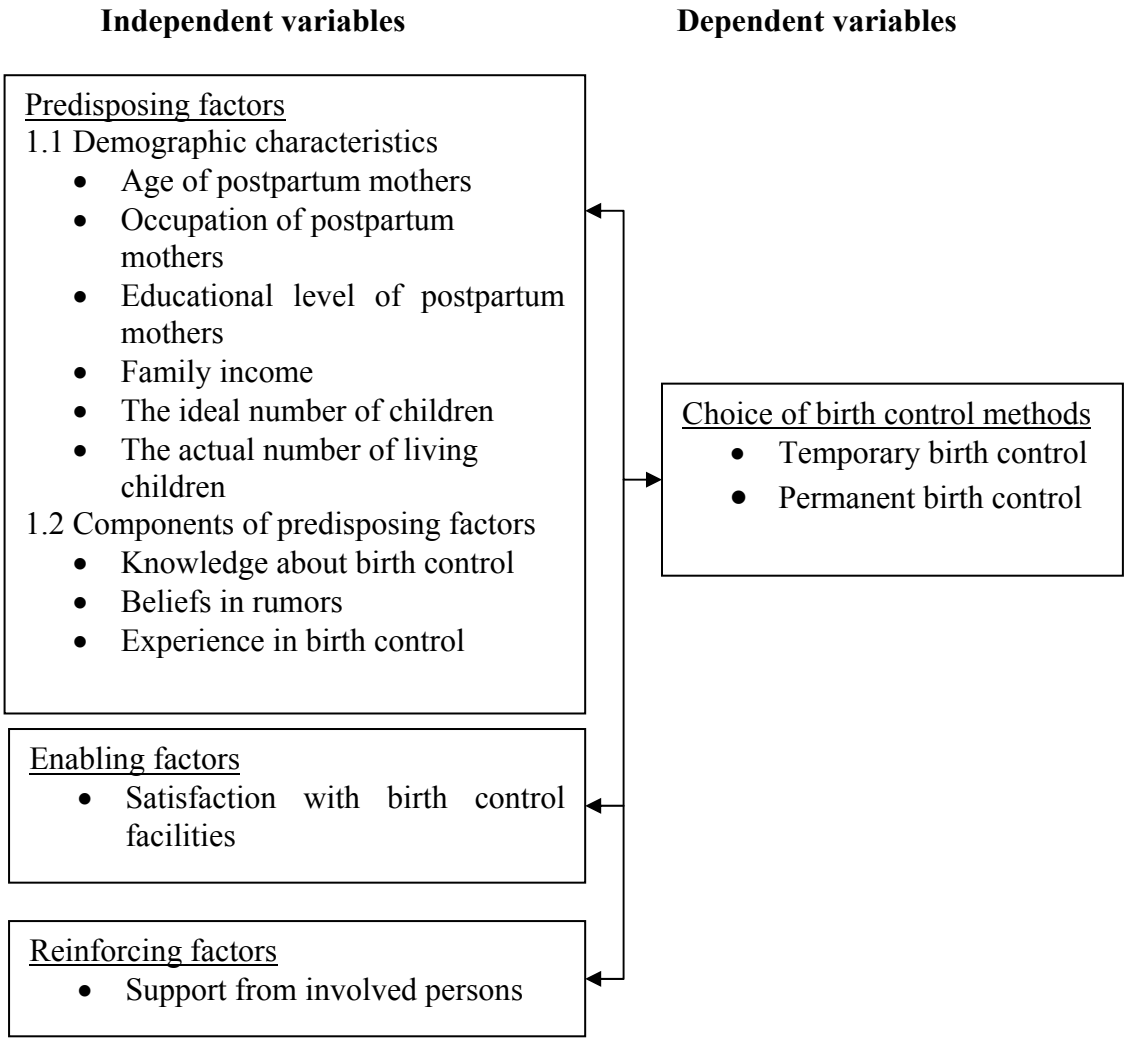

Figure 1: Conceptual Framework of the Study

CHAPTER III

REREARCH METHODOLOGY

The present research was a cross-sectional study conducted with postpartum mothers who had at least two living children during their convalescence at Amnajcharoen Hospital.

Population and sampling

The population was postpartum mothers who had at least two living children.

The sample consisted of 290 postpartum mothers with two or more living children who had given birth and were convalescing at Amnajcharoen Hospital.

Sample size and sampling method

The subjects were selected by means of simple random sampling using the registration records of the delivery unit with the following formula:

$$n = \frac{Z^2 \alpha/_2 \; p(1-p)}{d^2} \qquad (30)$$

When n = size of the sample

Z = value of standard curve at the .05 level

p = proportion of the parameter yielding the largest number of sample consisting of postpartum mothers with two or more living children

undergoing sterilization as means of permanent birth control at Amnajcharoen Hospital in 2002 equal to 0.25

d = allowable variation equal to 0.05

Then,

$$n = \frac{(1.96)^2 \ (0.25)\ (0.75)}{(0.0025)}$$

$$n = \frac{0.7203}{0.0025}$$

n = 289 cases

Research instrument

The instrument used in this study was the questionnaire developed by the researcher based on an extensive review of existing related research and relevant literature to serve the objectives of the present study. The questionnaire had been validated to ensure its quality as follows:

1. Content validity—A panel of three experts reviewed the questionnaire for accuracy, completeness, and language appropriateness.

2. Reliability—The questionnaire was revised based on the comments and suggestions of experts before being tried out with 30 subjects who shared similar characteristics with the subjects of the present study.

The questionnaire was then revised and adjusted one more time before using with the actual subjects.

The research instrument could be divided into five parts as follows:

Part I: Demographic characteristics of the subjects

Part II: Knowledge about birth control

This part consisted of 20 close-ended questions with 3-4 choices of responses. The correct responses would get the score of 1, while the incorrect responses or the “I

don't know" responses would get the score of 0. The level of knowledge about birth control was then divided into three levels based on the criteria of Seree Lacharoj (31):

- Low level: the scores lower than 60% (0 – 11 points)
- Moderate level: the scores between 60 and 80% (12 – 15 points)
- High level: the scores higher than 80% (16 – 20 points)

Part III Information related to beliefs in birth control

This part was composed of 17 close-ended questions with eight positive items and nine negative items. The responses were in the form of Likert-scale offering three choices of responses. The scoring was as follows:

For positive items:

'Believing' equal to 3 points

'Not sure' equal to 2 points

'Not believing' equal to 1 point

For negative items:

'Believing' equal to 1 point

'Not sure' equal to 2 points

'Not believing' equal to 3 points

The total scores ranged from 17 to 51 points, which could then further be categorized based on Seree Lachroj's criteria as follows:

- Incorrect belief: the scores lower than 60% (< 30 points)

-Moderate belief: the scores between 60 and 80% (30 – 40 points)

-Correct belief: the scores higher than 80% (41 –51 points)

Part IV: Data regarding family planning

Part V: Satisfaction with birth control facilities

The level of satisfaction could be arranged in the order of significance as follows:

- Level 1: most satisfied equal to 3 points
- Level 2: moderately satisfied equal to 2 points
- Level 3: not satisfied equal to 1 point

Data collection

The steps involved in data collection are as follows:

1. A letter issued by the Faculty of Graduate Studies, Mahidol University, will be sent to Public Health Official, Amnajcharoen Province, to ask for cooperation in data collection. After permission to collect data is granted, the researcher will meet the director of Amnajcharoen Hospital, as well as the head nurse and head of the postpartum unit of Amnajcharoen Hospital, to describe research objectives and data collection procedures.

2. The researcher will interview postpartum mothers who meet the selection criteria during their convalescence at Amnajcharoen Hospital until the desired number of subjects is covered.

3. The researcher will check the questionnaires for completeness of data.

Data analysis

1. **Preparation of data**
   - 1.1 The data in the questionnaire were be checked for completeness and accuracy.
   - 1.2 The data were then be coded and recorded onto a diskette.
   - 1.3 A computerized program was be used to analyze the obtained data.
2. **Statistical analyses**
   - 2.1 Descriptive statistics including percentage, mean, and standard deviation were used to describe the demographic characteristics of the sample.
   - 2.2 Inferential statistics were used as follows:
     - 2.2.1 Chi-square test was used to determine the relationship between predisposing factors, enabling factors, and reinforcing factors and choice of birth control methods.
     - 2.2.2 Pearson's contingency coefficient was employed to assess different levels of relationships among study variables.

2.2.3 Discriminant analysis was performed to determine factors influencing choice of birth control methods of postpartum mothers with two or more living children.

CHAPTER IV

RESEARCH RESULTS

The present study was a cross-sectional study which aimed at investigating predisposing factors, enabling factors, and reinforcing factors affecting postpartum mothers' choice of birth control methods. The subjects were 290 mothers with at least two living children who gave birth at Amnajcharoen Hospital, Amnajcharoen Province. Data were collected by means of an interview based on a previously designed questionnaire. In this chapter, the research findings are discussed in three parts as follows:

Part I: Demographic characteristics of the subjects

Part II: Analysis of the relationship between different factors and choice of birth control

Part III: Analysis of influential factors affecting choice of birth control

Part I: Demographic characteristics of the subjects

1. Demographic characteristics

1.1 Age The subjects in the present study ranged in age from 19 to 44 years old. The largest group of subjects, or 38.3%, were between 25 and 29 years old.

The second largest group, or 30.7%, were between 30 and 34 years old. Only0.3% were between 15 and 19 years old. The mean age of the subjects was 29.18 years.

1.2 Occupation More than half of the subjects, or 51%, were agriculturists, followed by those who were housewives, accounting for another 22.1%.

1.3 Educational background It was found that close to three-quarters of the subjects, or 71%, completed elementary education. Moreover, about one-quarter, or 26.6%, graduated from a high school, and only 2.4% had education higher than secondary education.

1.4 Family income The subjects had a monthly income ranging from 300 to 3,000 baht. The largest group, or 35.2%, had a family income of 2,001 to 4,000 per month. Second came those who had a monthly income between 500 and 2,000 baht, contributing another 29.7%. The mean monthly income of the subjects was 4.087.41 baht.

1.5 Ideal number of children The subjects indicated that they wanted to have one to four children of their own. The majority of the subjects, or 65.5%, wanted to have two children.

1.6 Number of living children The subjects in the present study had two to six living children. Approximately three-fourths, or 73.1%, had two living children.

1.7 Knowledge about birth control There were altogether 20 questions related to birth control. The subjects got the score of 1 for each correct response and the score of 0 for every incorrect response or the “I do not know” response. The total

scores were divided into three groups: high (16 – 20 points), moderate (12 – 15 points) and low (0 – 11 points). The subjects' total scores ranged from 4 to 19, with the mean of 12.49. Close to half, or 42.1%, had the knowledge about birth control at a moderate level (12 – 15 points). as shown in Table 1.

Table 1 Number and percentage of postpartum mothers with at least two living children categorized according to demographic characteristics

Demographic Characteristics	Total	
	n	%
	n = 290	
Age (years)		
15-19	1	0.3
20-24	51	17.6
25-29	111	38.3
30-34	89	30.7
35-39	30	10.3
40-44	8	2.8

Table 1 Number and percentage of postpartum mothers with at least two living children categorized according to demographic characteristics (Cont.)

Demographic Characteristics	Total	
	n	%
	n = 290	
Mean (X)	29.18	
Standard Deviation	4.91	
Minimum-Maximum	19-44	
Occupation		
Trader	23	7.9
Government /Public enterprise	4	1.4
Employee	29	10.0
Wage earner	22	7.6
Agriculturist	148	51.0
Housewife	64	22.1
Educational background		
Elementary	206	71.0
Secondary	77	26.6
Higher than secondary	7	2.4

Table 1 Number and percentage of postpartum mothers with at least two living children categorized according to demographic characteristics (Cont.)

Demographic Characteristics	Total	
	n	%
	n = 290	
Family income (baht)		
500-2,000	86	29.7
2,001-4,000	102	35.2
4,001-6,000	61	21.0
6,001-8,000	19	6.6
8,001-10,000	16	5.5
> 10,000	6	2.1
Mean (X)	4,087.41	
Standard Deviation	3,262.81	
Minimum-Maximum	300-30,000	
Ideal number of children		
1	67	23.1
2	190	65.5
3	26	9.0
> 4	7	2.4
Mean (X)	1.90	

Table 1 Number and percentage of postpartum mothers with at least two living children categorized according to demographic characteristics (Cont.)

Demographic Characteristics	Total n = 290	
	n	%
Standard Deviation	0.63	
Minimum-Maximum	1-4	
Number of living children		
2	212	73.1
3	65	22.4
>4	13	4.5
Mean (X)	2.33	
Standard Deviation	0.61	
Minimum-Maximum	2-6	
Knowledge about birth control (points)		
Low	116	40.0
Moderate	122	42.1
High	52	17.9
Mean (X)	12.49	
Standard Deviation	3.16	
Minimum-Maximum	4-19	

Knowledge about birth control (each item)

When considering each item of the questions regarding knowledge about birth control, it was found that the items to which the subjects responded with a higher percentage of accuracy were those related to the comparison between the effectiveness of counting the safety period and sterilization, appropriate time to start taking contraceptive pills, knowledge about contraceptive pills, the period before having the next contraceptive injection, the effectiveness of sterilization to prevent birth, the comparison between the

effectiveness between temporary and permanent birth control methods, and the outcome of female sterilization.

On the other hand, the items which received the correct response rates at a low level, indicating that dissemination of knowledge among the subjects was needed, included those concerning knowledge about counting the safety period to have sexual intercourse to prevent birth, practice when forgetting to take contraceptive pills, side effects of contraceptive injection, appropriate time to have the first contraceptive injection, effectiveness of the I.U.D. to prevent birth, appropriate time to start using the I.U.D., period of time to use the I.U.D., knowledge about female sterilization, and knowledge about male vasectomy, as shown in Table 2.

Table 2 Percentage of postpartum mothers with at least two living children categorized according to correct responses to items on knowledge about birth control

Items on knowledge about birth control	Total (n = 290) %
1. Birth control by counting the safety period	26.9
2. Comparison of the effectiveness between counting the safety period and sterilization	81.7
3. Appropriate time to start taking the first contraceptive pills	81.0
4. Knowledge about contraceptive pills	95.9
5. Practice when forgetting to take contraceptive pills	57.2
6. Period of time before having the next contraceptive injection	95.9
7. Side effects of contraceptive injection	40.7
8. Appropriate time to have the first contraceptive injection	53.1
9. Use of I.U.D. to prevent	77.6

10. Effectiveness of I.U.D.	23.8
11. Appropriate time to use the I.U.D.	39.0
12. Period of time to use the I.U.D.	40.7
13. Knowledge about female sterilization	34.8
14. Period of time for female sterilization	72.1
15. Knowledge about vasectomy	9.7
16. Effectiveness of sterilization and vasectomy	96.6
17. Comparison of effectiveness between temporary and permanent birth control methods	93.8
18. Outcome of female sterilization	82.8
19. Practice after having postpartum sterilization	77.9
20. Sexual intercourse after having postpartum sterilization	67.6

1.8 Beliefs in rumors The items eliciting the subjects' beliefs in rumors concerning birth control consisted of 17 items. The subjects could choose among three responses—believe so, not certain, and do not believe so—for each of the items. The scoring was 3, 2, and 1 for positive items, respectively, and 1, 2, and 3 for negative items, respectively. The total scores were then divided into three levels. The high level meant that the subjects had correct beliefs (41 – 51 points), the moderate level meant that the subjects had some correct and some incorrect beliefs (30 – 40 points), and the low level meant that the subjects had incorrect beliefs or misunderstanding about birth control and contraception (17 – 29 points). The findings of the study revealed that more than half of the subjects, or 60.3%, had beliefs in rumors at a moderate level. As regards mean scores, the total mean score for all subjects was 39.49, as shown in Table 4.

Table 3 Number and percentage of postpartum mothers with at least two living children categorized according to beliefs in rumors

	Total	
	n	%
	n = 290	
Beliefs in rumors (points)		
Low	3	1.0
Moderate	175	60.3
High	112	38.6
Mean (X)	39.49	
Standard Deviation	4.81	
Minimum-Maximum	28-51	

Beliefs in rumors (each item)

When considering the items eliciting the subjects' beliefs in rumors concerning birth control, there were only two items in which the subjects had correct belief at a high level; that is, the items "birth control is the means to prevent pregnancy" and "After female sterilization, females continue to have normal sexual desires."

The items in which the subjects had incorrect belief, indicating that dissemination of correct knowledge was called for, were "Withdrawal before ejaculation makes males become bad-tempered," followed by "Continued use of contraceptive injection leads to irregular heartbeat and headache," to which only 25.2% and 27.9% of the subjects responded correctly, respectively, as shown in Table 4.

Table 4 Percentage of postpartum mothers categorized according to low percentage of correct beliefs in rumors (by item)

Items on beliefs in rumors	Total (n = 290) %
1. Taking contraceptive pills can cause breast cancer.	36.2
2. Having contraceptive injections for a long period of time can lead to irregular heartbeats and headache.	27.9
3. After removing the I.U.D., it will be difficult to conceive or it can easily lead to infertility.	35.9
4. Withdrawal can lead to irritability and bad temper.	25.2
5. Female sterilization results in weight gain.	35.5
6. Sterilized women have more sexual desires.	44.8
7. After sterilization, it is difficult to work hard.	35.9
8. Sterilized men have less sexual desires.	30.7
9. Sterilization leads to forgetfulness.	59.7
10. Birth control is prevention of pregnancy.	95.2
11. If forgetting to take a contraceptive pill, the person should take it as soon as she realizes that.	75.2
12. The I.U.D. can prevent pregnancy as soon as it is inserted.	55.9
13. After sterilization, women still have normal sexual desires.	84.5
14. Those who do not want to have any more children should be sterilized.	79.3
15. The I.U.D. which has copper as its component can result in lightning strike.	62.8
16. The I.U.D. is an easy birth control method as its effect lasts for years.	62.1
17. Using the I.U.D. does not affect breast-feeding.	70.7

1.9 Experience with birth control Almost all of the subjects in the present study (94.8%) had previous experience with birth control before this pregnancy; only 5.2% of them had never had such experience. When considering the subjects who had experience with birth control, it was found that more than three-quarters, or 76.4%, took contraceptive pills and 60.7% had contraceptive injections, as shown in Tables 5 and 6.

With regard to satisfaction with the withdrawal technique, 89.2% of the subjects felt satisfied with this method of birth control, while 10.5% did not, as shown in Table 6.

When considering the problem with the last method of birth control, it was found that 81.8% of the subjects did not have problem with the method, whereas 18.2% did. Further, 16% of the subjects who chose temporary birth control had problem with this method, while 22.4% of the subjects who chose permanent birth control had problem with this method. Moreover, one-third of the subjects who did not use birth control used to have problem with this method. With regard to the problems the subjects had to cope with, 70% suffered from its side effects, 10% became pregnant, and 20% experienced inconvenience, as shown in Table 6.

Table 5 Number and percentage of postpartum mothers with at least two living children categorized according to experience with birth control

	Total	
	n	%
	n = 290	
Experience with birth control (points)		
Having	15	5.2
Not having	275	94.8

Table 6 Number and percentage of postpartum mothers with at least two living children categorized according to satisfaction and problems with birth control

	Total	
	n	%
	n = 275	
Experience with birth control		
(There could be more than one answer)		
Counting the safety period	13	4.7
Withdrawal	13	4.7
Condoms	31	11.3
Contraceptive pills	210	76.4
Contraceptive injection	167	60.7
I.U.D.	51	18.5
Implant of contraceptive pill	14	5.1
Satisfaction with experience with birth control		
No satisfaction	29	10.5
Indifferent	18	6.5
Satisfaction	228	82.9

Table 6 Number and percentage of postpartum mothers with at least two living children categorized according to satisfaction and problems with birth control (Cont.)

	Total	
	n	%
	n = 275	
Problems with birth control		
Having no problem	225	81.8
Having problem	50	18.2
-from side effects	[35]	[70.0]
-from pregnancy	[5]	[10.0]
-from lack of convenience	[10]	[20.0]

2. Enabling factors

2.1 Satisfaction with birth control facility

The largest group of subjects, or 64%, sought birth control services from public health centers, and 18.5% received services from Amnajcharoen Hospital, respectively, as shown in Table 7.

In addition, when considering the subjects' satisfaction with the services they received from these birth control facilities, it was found that the most important reason the subjects chose a facility was convenience in traveling, followed by easy accessibility to services and time. The fourth reason was reasonable price, while friendly and knowledgeable staff ranked fifth, as shown in Table 7.

When grouping the subjects' satisfaction with birth control facility, with high scores ranging from 12 to 15, moderate scores ranging from 9 to 11, and low scores ranging from 3 to 8, it was found that more than half of the subjects, or 59.3%, had satisfaction at a high level, 20.7% at a moderate level, and 20.0% at a low level, as shown in Table 7.

Table 7 Number and percentage of postpartum mothers with at least two living children categorized according to satisfaction with birth control facility

	Total	
	n	%
	n = 275	
Birth control facility		
Amnajcharoen Hospital	51	18.5
Other hospitals	14	5.1
Health clinics	19	6.9
Public health centers	176	64.0
Drugstores	15	5.5

Table 7 Number and percentage of postpartum mothers with at least two living children categorized according to satisfaction with birth control facility (Cont.)

	Total	
	n	%
	n = 275	
Satisfaction with birth control facility (point)		
Traveling convenience	684	1
Reasonable price	149	4
Appropriate timing	323	3
Easy accessibility	384	2
Friendly and knowledgeable staff	109	5
Level of satisfaction with birth control facility		
Low	55	20.0
Moderate	57	20.7
High	163	59.3

3. Reinforcing factors

3.1 Support from related persons In the present study, the largest group of subjects, or 68.7%, did not receive advice from anybody and made the decision themselves, and 15.3% received advice from health professionals. The related persons who had the least influence were the subjects' own parents or parents-in-law, accounting for only 2.5% , as shown in Table 8.

When considering advice and persuasion received, it was discovered that more than half, or 54.1%, of the subjects received advice and persuasion from others. The most important source of advice and persuasion was their neighbors, making up 52.2%, followed by public health officials, making up another 47.1%, as shown in Table 8.

When considering the husbands' support of permanent birth control in particular, it was discovered that 60% received support from their husbands, while 40% did not, as shown in Table 8.

Table 8 Number and percentage of postpartum mothers with at least two living children categorized according to reinforcing factors

	Total	
	n	%
	n = 275	
Supportive persons		
Husband	18	6.5
Own or husband's parents	7	2.5
Relatives or friends	19	6.9
Health professionals	42	15.3
No advice	189	68.7

Table 8 Number and percentage of postpartum mothers with at least two living children categorized according to reinforcing factors (Cont.)

	Total	
	n	%
	n = 290	
Advice – Persuasion about sterilization		
Not having any	133	45.9
Having	157	54.1
-Radio/TV/Newspapers	[7]	[4.5]
-Husband	[5]	[3.2]
-Parents, relatives, friends	[37]	[23.6]
-Public health officials	[74]	[47.1]
-Neighbors	[82]	[52.2]
Support from husbands		
Not having	116	40.0
Having	174	60.0

The present study included 290 subjects that could further be divided into three groups. The first group consisted of 196 subjects who chose temporary birth control, making up 67.6% of the total subjects. The second group was composed of 90 subjects who chose permanent birth control, or 31.0% of the total subjects. The last group included four subjects who did not use any means of birth control, accounting for 1.4% of the total number of subjects. Of the subjects who used different means of temporary birth control, 39 subjects (19.9%) used contraceptive pills, 119 subjects (60.7%) used contraceptive injection, two subjects (1%) used condoms, 18 subjects (9.2%) used the I.U.D. and 18 subjects (another 9.2%) used implant of contraceptive pills, as shown in

Table 9. On the other hand, for those who used permanent birth control, 63 subjects had sterilization operation after giving birth, while 27 subjects obtained sterilization operation together with child delivery. For the four subjects who did not use any form of birth control, two of them had a husband who worked abroad, one was a widowed, and the last one wanted to have more children.

When considering the subjects who participated in the present study, it was found that the choice of means of birth control was at the 95% confidence level, with the permanent birth control at 63-73%, while the temporary birth control at 26-36%.

Table 9 Number and percentage of postpartum mothers categorized according to methods of birth control

Method of birth control	Number	Percentage
Temporary birth control	196	67.6
-Contraceptive pills	[39]	[19.9]
-Contraceptive injections	[119]	[60.7]
-Condoms	[2]	[1.0]
-I.U.D.	[18]	[9.2]
-Implant of contraceptive pill	[18]	[9.2]
Permanent birth control	90	31.0
No birth control	4	1.4
Total	290	100.0

Part II : Analysis of the relationship between factors and choice of birth control

This part of the analysis was conducted with the subjects who chose either temporary or permanent birth controls to determine different factors that may have affected their choice. It was found that of the 286 subjects who chose either form of the birth control, 196 chose temporary birth control while 90 chose permanent birth control.

The Chi-square test revealed that the predisposing factors which were associated with the subjects' choice of birth control with statistical significance were age, occupation, family income, ideal number of children, knowledge about birth control, and beliefs in rumors. Also, the reinforcing factor which was statistically significantly associated with choice of birth control method was support from husbands.

On the contrary, the predisposing factors which were not associated with postpartum subjects' choice of birth control were educational background, number of living children, and experience with birth control, whereas the reinforcing factor with no association was support from related persons and advice and persuasion to have birth control.

The details are as follows:

1. Predisposing factors

1.1 Age It was found that the largest group of subjects who used permanent birth control were those who were between 35 and 39 years old, as more than half of them, or 53.3%, chose this birth control method, whereas the subjects who were not older than 24 years old chose this method least, as only 16% of them chose to be sterilized. It could be clearly seen that the proportion of the subjects who chose permanent birth control increased with age, as 30.9%, 33.0%, and 53.3% of the subjects who were 25 – 29 years old, 30 – 34 years old, and 35 – 39 years old chose permanent birth control, respectively. However, the percentage decreased in the older group of subjects, as only 37.5% of those who were 40 to 44 years old opted for sterilization. A statistical analysis revealed that age was significantly associated with choice of birth control, even though the significance level was rather low (0.204).

1.2 Occupation The findings of the study indicated that the largest group of subjects who chose permanent birth control were government officials or public enterprise employees, making up 75% of the total. Second came those who were traders, contributing 54.5% of, followed by employees, agriculturists, wage earners and housewives, accounting for 35.7%, 31.1%, 23.8%, and 22.2%, respectively. On the other hand, the largest group of subjects who chose temporary birth control were housewives,

accounting for more than three-quarters or 77.8% of the total subjects. This was followed by wage earners, agriculturists, employees, agriculturists, and government officials or public enterprise employees, making up 76.2%, 68.9%, 64.3%, 45.5%, and 25%, respectively. A statistical analysis suggested that there was a statistically significant relationship between occupation and choice of birth control method, even though the significance level was considered low equaling 0.203.

1.3 Educational background It was discovered that there was not much difference between the numbers of subjects who had elementary education and higher levels of education when it came to choosing permanent birth control, as 31.5% and 31.3% of them opted to be sterilized, respectively. A statistical analysis indicated that the subjects who chose permanent or temporary birth control were rather similar in terms of educational background. Also, there was no statistically significant relationship between the subjects' educational background and their choice of birth control method.

1.4 Family income The findings of the present study pointed out that the higher the family income, the more likely the subjects would choose permanent birth control. In fact, only 19.6% of the subjects whose income ranged from 2,001 to 4,000 baht per month chose permanent birth control. The percentage increased to 35.6% of those who earned 4,001 to 6,000 baht per month, 38.9% of those whose income was from 6,001 to 8,000 baht per month, and 52.4% of those who earned more than 8,000 baht per month. According to a statistical analysis, family income was significantly associated with choice of birth control even though the significance level was considered low (0.206).

1.5 Ideal number of children In this study, it was discovered that the largest group of subjects who chose permanent birth control consisted of postpartum mothers who wanted to have only two children, or 37% of the total. Furthermore, the percentage of the subjects who chose sterilization decreased among those who wanted to have three children, making up 23.3%. Finally, only 19.4% of the subjects who wanted to have one child chose permanent birth control. A statistical analysis indicated that the ideal number of children was statistically significantly associated with the choice of birth control, but the significance level was rather low, equaling 0.167.

1.6 Number of living children About one-fourth, or 27.8%, of the subjects who had two children chose permanent birth control, while a little more than one-third, or 38.5%, of the subjects who had four children or more opted for permanent birth control. The largest percentage of the subjects who chose sterilization as a means of birth control consisted of those who had three children, making up 42.2% of the total. However, a statistical analysis revealed no statistical significance relationship between the number of living children and choice of birth control.

1.7 Knowledge about birth control The subjects who had a low level of knowledge about birth control constituted the smallest percentage of the subjects who chose permanent birth control (15% of the total). The percentage rose as the subjects' knowledge about birth control increased. In other words, 33.1% and 63.5% of the subjects who chose permanent birth control had moderate and high levels of knowledge about birth control, respectively. According to a statistical analysis, there was a significant relationship between knowledge about birth control and choice of birth control method, but the significance level was considered low at 0.346.

1.8 Beliefs in rumors The findings suggested that the subjects who had a moderate level of beliefs in rumors chose permanent birth control less than other subjects (making up 22.7%). However, when they had correct beliefs in rumors, they chose more permanent birth control, as 45% of those who chose permanent birth control had a high level of beliefs in rumors, and 33.3% of those with permanent birth control were those with a low level of beliefs in rumors. A statistical analysis revealed that there was a significant relationship between beliefs in rumors and choice of birth control method, but the significance level was low at 0.228.

1.9 Experience with birth control The subjects who had never had any experience with birth control chose more permanent birth control than those who had had such experience, accounting for 35.7% and 31.3% of the total, respectively. A statistical analysis revealed no significant relationship between experience with birth control and choice of birth control, however, as shown in Table 10.

Table 10 The relationship between predisposing factors and choice of birth control of postpartum mothers with at least two living children

	Temporary Birth Control		Permanent Birth Control		x2 – test	df	p-value	C
	n	%	n	%				
	n = 196		n = 90					
Age (years)								
≤24	42	84.0	8	16.0				
25-29	76	69.1	34	30.9				
30-34	59	67.0	29	33.0	12.439	4	0.014*	0.204
35-39	14	46.7	16	53.3				
40-44	5	62.5	3	37.5				
Occupation								
Trader	10	45.5	12	54.5				
Government /	1	25.0	3	75.0				
-Public enterprise								
Employee	18	64.3	10	35.7	12.261	5	0.031*	0.203
Wage earner	16	76.2	5	23.8				
Agriculturist	102	68.9	46	31.1				
Housewife	49	77.8	14	22.2				

Table 10 The relationship between predisposing factors and choice of birth control of postpartum mothers with at least two living children (Cont.)

	Temporary Birth Control		Permanent Birth Control		x2 – test	df	p-value	C
	n	%	n	%				
	n = 196		n = 90					
Educational background								
Elementary	139	68.5	64	31.5				
Higher than elementary	57	68.7	26	31.3	0.001	1	0.973	
Family income								
500-2,000	55	64.0	31	36.0				
2,001-4,000	82	80.4	20	19.6				
4,001-6,000	38	64.4	21	35.6	12.673	4	0.013*	0.206
6,001-8,000	11	61.1	7	38.9				
> 8,000	10	47.6	11	52.4				
Ideal number of children								
1	54	80.6	13	19.4				
2	119	63.0	70	37.0	8.161	2	0.017*	0.167
≥ 3	23	76.7	7	23.3				

Table 10 The relationship between predisposing factors and choice of birth control of postpartum mothers with at least two living children (Cont.)

	Temporary Birth Control		Permanent Birth Control		x2 – test	df	p-value	C
	n	%	n	%				
	n = 196		n = 90					
Number of living children								
2	151	72.2	58	27.8				
3	37	57.8	27	42.2	5.044	2	0.080	
≥ 4	8	61.5	5	38.5				
Knowledge about birth control (points)								
Low	96	85.0	17	15.0				
Moderate	81	66.9	40	33.1	38.956	2	<0.001**	0.346
High	19	36.5	33	63.5				
Beliefs in rumors								
Low	2	66.7	1	33.3				
Moderate	133	77.3	39	22.7	15.660	2	<0.001**	0.228
High	61	55.0	50	45.0				
Experience with birth control								
Not having	9	64.3	5	35.7				
Having	187	68.8	85	31.3	0.123	1	0.726	

2. Enabling factors

2.1 Satisfaction with birth control facility Regarding this particular factor, it was discovered that the subjects who chose permanent birth control had the lowest level of satisfaction, accounting for 41.8%, followed by those with a moderate level of satisfaction, or another 35.7%. However, a statistical analysis revealed that satisfaction

with birth control facility was not associated with choice of birth control methods, as shown in Table 11.

Table 11 The relationship between enabling factors and choice of birth control of postpartum mothers with at least two living children

	Temporary Birth Control n = 196		Permanent Birth Control n = 90		x2 – test	df	p-value	C
	n	%	n	%				
Level of satisfaction with birth control facility								
-Low	32	58.2	23	41.8				
-Moderate	36	64.3	20	35.7	5.376	2	0.068	
-High	119	73.9	42	26.1				

3. Reinforcing factor

3.1 Support from related persons In this study, the findings revealed that approximately one-third of the subjects who chose permanent birth control, or 33.7%, made the decision on their own without support from anybody, while 28.6% were persuaded by medical personnel. A statistical analysis indicated that there was no significant relationship between support from related persons and choice of birth control method, as shown in Table 12.

When considering advice-persuasion to have birth control, it was found that the subjects who had previously received advice and persuasion chose more permanent birth control than those who had not, making up 35.9% and 26.2%, respectively. A statistical analysis, however, yielded no significant relationship between advice and persuasion received and choice of birth control methods, as shown in Table 12.

As regards the support from the subjects' husbands, the findings suggested that the subjects who received support from their husbands chose permanent birth control more than those who did not have spousal support, accounting for 48.9% and 4.5%, respectively. Besides, a statistical analysis indicated that support from the husbands was statistically significantly associated with the postpartum subjects' choice of birth control, and the significance level was considered moderate at 0.423, as shown in Table 12.

Table 12 The relationship between reinforcing factors and choice of birth control of postpartum mothers with at least two living children

	Temporary Birth Control n = 196		Permanent Birth Control n = 90		x2 – test	df	p-value	C
	n	%	n	%				
Supportive persons								
-Family members	33	76.7	10	23.3				
-Health professionals	30	71.4	12	28.6	1.937	2	0.380	
-No advice	124	66.3	63	33.7				
Advice-Persuasion to have birth control								
Not having	96	73.8	34	26.2	3.122	1	0.077	
Having	100	64.1	56	35.9				
Support from husbands								
Not having	107	95.5	5	4.5	62.249	1	<0.001**	0.423
Having	89	51.1	85	48.9				

Part III Analysis of influential factors affecting choice of birth control

In analyzing factors influencing the postpartum subjects' choice of birth control, the discriminant analysis was conducted in the multivariate statistical analysis to identify the independent variables which had an influence on the dependent variable. The subjects who chose temporary and permanent birth control were differentiated and grouped. In this step of the analysis, the stepwise method was employed.

The independent variables or the discriminant variables used in the analysis consisted of eleven variables. The discriminant variables should be quantitative variables; however, if they were categorical or qualitative variables, they would be adjusted to be dummy variables before entering the equation as follows:

Occupation	Code
Agriculturists	1
Not agriculturists or housewives	0
Experience with birth control	
Having	1
Not having	0
Satisfaction with birth control facility (first choice)	
Traveling convenience	1
Other reasons	0
Support from related persons	
With support from husbands	1
Without support from husbands	0

In this study, the interval scales included age, educational background, family income, ideal number of children, number of living children, knowledge about birth control, and beliefs in rumors. The raw scores obtained from the data collection were directly entered into the analysis.

Entering the independent variables into the analysis could be done by initially examining the relationship among the independent variables using Wilk's Lamda or the F test. The selected variables had to have the F value higher than 1 with the statistical significance at the 0.05 level. In the present study, there were only four variables which

could be entered into the equation: age, knowledge about birth control, beliefs in rumors, and support from the husbands, as shown in Table 13.

Table 13 Wilk's Lamda, F value, and significance of the variables entered into the equation

Step	Independent variable	Wilk's Lamda	F	Significant
1	Support from husbands	0.782	79.011	0.000
2	Knowledge about birth control	0.705	59.167	0.000
3	Age	0.692	41.768	0.000
4	Correct beliefs in rumors	0.681	32.902	0.000

The analysis of the variables affecting the choice of temporary or permanent birth control led to the coefficient of the standard score and raw score as shown in Table 14.

Table 14 Coefficient of variables in discriminating equation of postpartum mothers with permanent and temporary birth controls

Variable	Discriminant coefficient		Rank
	Raw Score (Discriminating)	Standard Score (Comparing rank of influence)	Influence
Support from husbands	1.642	0.711	1
Knowledge about birth control	0.150	0.439	2
Age	0.057	0.275	3
Correct beliefs in rumors	0.055	0.258	4
Constant	-6.726		

A comparison of the significance level among the variables or the influence on the discrimination of the variables could be conducted by examining the coefficient of the standard score derived from the coefficient of the raw score. In addition, the mark in front of the coefficient value indicated the direction of the relationship between the variables and the equation. According to Table 14, the influence level and the direction of the relationship could be explained as follows:

Support from the husbands Support from the husbands was the variable with the highest level of influence, with the positive direction. Put another way, the postpartum subjects whose husbands supported their decision to be sterilized tended to choose permanent birth control more than those who did not receive such support.

Knowledge about birth control This was the second most influential variable affecting the postpartum subjects' choice of birth control, with the positive direction. In other words, the subjects with higher level of knowledge about birth control tended to choose permanent birth control more than the subjects whose knowledge of birth control was at a low level.

Age Age was the third most influential variable affecting the postpartum subjects' choice of birth control, with the positive direction. The older the subjects, the more likely they chose permanent birth control.

Beliefs in rumors This was the fourth most influential variable affecting the postpartum subjects' choice of birth control, with the positive direction. That is, the subjects who had a high level of beliefs in rumors or had correct beliefs in rumors tended to opt for permanent birth control more than the subjects who had a low level of beliefs in rumors or had incorrect beliefs in rumors.

The quality of the discriminant analysis in categorizing the postpartum subjects into those with temporary birth control and those with permanent birth control in this study had the canonical correlation value equal to 0.565. This meant that the relationship between the independent variables and the equation was at a moderate level, and the Eigen value was also at a moderate level of 0.468. Wilk's Lamda was 0.681, indicating that the discrimination was at a moderate level. The Chi-square test also revealed that this

equation could be used to discriminate between two groups of subjects with the statistical significance value at the 0.001 level, as shown in Table 15.

Table 15 Different values used in canonical discriminant function

Discriminant	Eigen (1) Value	Canonical(2) correlation	Wilk's Lamda(3)	Chi-square	df	sig
1	0.468	0.565	0.681	108.328	4	<0.001

*Remarks:

1. For the value used to determine the comparative significance of the variable, the higher the value, the better.
2. The value determined the relationship between the equation and the group of independent variables which signified the dependent variable's membership of the group. The higher the value, the better the equation in predicting the group membership.
3. As regards the statistical value used to test the significance of the group discrimination, the lower the value, the better the equation in discriminating groups.

The estimation based on the group equation derived in the analysis indicated that it could predict group membership by 74.1% of the total subjects. It could correctly predict the membership of the group choosing temporary birth control by 70.4% and the membership of the group choosing permanent birth control by 82.2%, as shown in Table 16.

Table 16 The estimation based on the discriminant equation derived in the analysis

	Estimated groups				
	Temporary birth control		Permanent birth control		Total
Actual group	n	%	n	%	n
Temporary birth control	138	70.4	58	29.6	196
Permanent birth control	16	17.8	74	82.2	90

The correct estimation was equal to 74.1%.

In conclusion, the analysis of factors influencing the postpartum subjects' use of temporary or permanent birth control using discriminant statistics revealed that of the eleven independent variables included, there were four variables which influenced the subjects' choice of temporary or permanent birth control which could be arranged according to the power of influence as follows: support from the husbands, knowledge about birth control, age, and beliefs in rumors. The discriminant equation could correctly predict group membership by 74.1% with the statistical significance level of 0.001.

CHAPTER V

DISCUSSION OF RESULTS

In this chapter, the discussion of research results are divided into two parts:

1. Discussion of research methodology
2. Discussion of research results

Part I: Discussion of Research Methodology

1. Research Design

The present study was a cross-sectional study which was conducted during a certain period of time by collecting data from primary sources using interviews. The interviews were carried out based on the questionnaire developed by the researcher. Thus, the instrument, as well as the observations during the interviews, led to accurate information which shed light on the actual problems and needs of the female subjects.

2. Sampling

The subjects recruited in this study were 290 females who had given live birth to at least two children. The subjects used child delivery services provided by Amnajcharoen Hospital during February 16 to April 30, 2003. They were selected by means of the simple random sampling technique.

3. Research Instrument

The instrument used in data collection was a questionnaire developed by the researcher based on the review of related literature and research. The items included in the questionnaire and the content were in compliance with the research objectives previously set. The questionnaire was validated by three experts and was tried out with a group of 30 subjects who had characteristics similar to those of the subjects in the present study. After that, the questionnaire was revised, and the reliability of the knowledge on birth control part was equal to 0.74, while that of the belief in rumor part was 0.78, which were considered acceptable. Therefore, it could be concluded that both parts of the questionnaire were reliable enough for the purposes of the present research.

4. Data Collection

The researcher collected the data herself based on the questionnaire previously developed. The subjects were postpartum mothers who were recovering in the maternity ward and special maternity ward. In the present study, data collection using a questionnaire enabled the researcher to ask the subjects questions, give explanation and clarification when the subjects were in doubt, and examine the consistency of the answers. As a result, the data collected was considered extensive and complete. All through the interviews the interviewers tried to avoid using leading questions when it came to eliciting the subjects' knowledge about and beliefs in birth control. In addition, this data collection method was also considered a method which enabled the researcher to gain insights directly from the studied population leading to up-to-date and accurate data. Thus, it was considered a valid and reliable data collection method. However, it was time-consuming and was not appropriate when a huge amount of data was needed over a long period of time.

5. Data Analysis

Descriptive statistics used in data analysis included percentage, mean, standard deviation. The relationships were tested with the Chi-square test, and Pearsons' Contingency Coefficient © was used to determine the levels of relationships. Finally, Discriminant analysis was also used to analyze the factors which affected the subjects' choice of birth control.

Part II: Discussion of Research Results

1. The relationship between predisposing factors and choice of birth control

1.1 The subjects' age In the present study, the subjects ranged in age from 19 to 44 years old. The largest group of subjects were between 25 and 29 years old, followed by those who were 30 to 34 years old. Only 0.3% of the subjects were between 15 and 19 years old. The mean age was 29.18 years. It is noteworthy at this point that even though the subjects in the study were those who already had at least two children of their own, 0.3% of the subjects were between 15 and 19 years old, which was considered a very young age. In addition, it was found that 13.1% of the subjects were those who should not have more children due to their physical condition; that is, they were older than 35 years old. And among these older mothers, 19 of them (or 50% of the total number of the subjects in this age group) chose to have permanent birth control. This is because these subjects already had enough children and did not want to take risks resulting from childbearing and childbirth. It is generally accepted that when the mother is older than 30 years old, the baby has a much higher risk of birth defects, disability, and stillborn. The mortality rate of infants born when the mother is older than 30 years old is higher than that of infants whose mothers were between 20 and 30 years old (32). Therefore, this group of subjects need the most effective means of birth control. However, in the present study, it was found that the older the subjects, the more they chose permanent birth control (Table 10). Statistical analysis also revealed that the subjects' age was statistically significantly related to the method of birth control at the 0.05 level. This was

in congruence with the studies of Wilailuck Pariyac hatkul (7) and Anna Wongkularp (15) which indicated that age of female subjects was associated with the choice of permanent birth control with statistical significance at the 0.05 level.

1.2 Occupation In this study, more than half of the subjects (51%) were agriculturists (Table 2), just like most of the female population living in a rural area. When considering their choice of birth control, it was found that the subjects who were government officials or public enterprise employees chose permanent birth control more than others (75%) (Table 10). Likewise, Wilailuck Pariyachatkul (7) found that females who were not agriculturists tended to use permanent birth control more than those working in the field of agriculture, accounting for 41.1%. Statistical analysis also revealed that the female subjects' occupation was associated with their choice of birth control with statistical significance at the 0.05 level. In other words, females in the field of agriculture were less likely to use permanent birth control when compared with those who had other occupations. One plausible explanation was that female agriculturists did not find pregnancy or child rearing an obstacle in their work. Also, they may have had a misconception or misunderstanding of permanent birth control. On the contrary, the females who worked in other professions tended to have higher education and worked outside home, so they had more chances to receive information and knowledge regarding family planning. Therefore, when they felt that they had enough children, they tended to choose permanent birth control to prevent pregnancy.

1.3 Education It was found in the present study that close to three-quarters of the subjects, or 71%, had elementary education (Table 2). This was considered a common characteristic of the female population living in a rural area of the country. This finding was consistent with those of Wilailuck Pariyachatkul (7) and Anongnit Trongwatanawut (19) which found that 82.6% and 73.3% of the female subjects living in Nakhonsawan and Sakolnakorn Provinces had elementary education, respectively. When considering the subjects' educational background and their choice of birth control, it was found that similar numbers of both those with elementary education

and those with higher levels of education used permanent birth control, accounting for 31.5% and 31.3%, respectively (Table 10). A statistical analysis revealed that the subjects' education was not associated with their choice of birth control. This finding agreed with the finding of Anna Wongkularp (15). This may be because the knowledge of birth control was widely disseminated in the communities through various forms of media, so the female population had an equal chance to learn about different means of birth control regardless of their educational background.

1.4 Family income The mean of the subjects' family income was 4,087.41 baht per month. When considering the relationship between family income and means of birth control, it was found that the subjects with higher family income tended to choose more permanent birth control. A statistical analysis revealed that family income was associated with choice of birth control with statistical significance at the 0.05 level (Table 10). This finding was not consistent with the finding of Yuwadee Witayapun (14) which showed that family income was not associated with postpartum sterilization. This may be because the study of Yuwadee Witayapun was conducted with the subjects living in Bangkok, so the difference in demographic characteristics brought about factors affecting the female subjects' decision to use contraception/sterilization, making the subjects with different family incomes have different decisions regarding means of birth control.

However, it is worth noting that in the present study, the subjects who had higher family income used more permanent birth control. One possible explanation is that the subjects with higher incomes had more knowledge regarding birth control and received more information from various media regarding family planning than the subjects who had lower incomes. For this reason, the subjects with higher incomes realized the necessity to choose a more effective means of birth control to eliminate the chance of pregnancy as much as possible.

1.5 Ideal number of children This study revealed that the mean number of children the subjects wanted to have was 2.0. The majority of the subjects, or 65.5%, wanted to have two children (Table 2). When considering the number of children wanted and the choice of birth control, it was found that the subjects' choice of permanent birth control was negatively related to the number of children wanted. Put another way, the subjects chose permanent birth control less when they wanted to have more children (Table 10). This is consistent with the finding of Anongnit Trongwatanawut (19) which showed that the females whose ideal number of children was lower tended to choose sterilization operation after they had two children. A statistical analysis also revealed that the ideal number of children was associated with the means of birth control with statistical significance at the 0.05 level.

1.6 Number of living children The subjects had two to six children, with close to three-quarters, or 73.1%, had two living children (Table 2). As this was a study conducted with the subjects with at least two living children, it was not surprising to find that most of the subjects had two living children. Similarly, Somsamai Marak (16) and Yuwadee Witayapun (14) found that 56.7% and 77.7% of the subjects had two living children, respectively. This is because both studies were conducted with the subjects who had at least two living children. When considering the association between the number of living children and the choice of birth control, it was found that the subjects who had at least three or four children used more permanent birth control than the subjects who had two living children. This was in agreement with the finding of Somsamai Marak (16) which showed that 26% of the subjects who had two children chose sterilization, while 62.8% of the subjects with three children did. However, a statistical analysis revealed that the number of living children was not associated with the choice of birth control. This may be because there were a small number of subjects who had three children in the study. Nevertheless, more than half, or 58.4%, of the subjects who had three children in this study chose temporary birth control. In fact, these subjects should be advised to use permanent birth control as they already had a large number of children.

1.7 Knowledge about birth control In the present study, 42% if the subjects had knowledge about birth control at the moderate level. (Table 1). When considering the relationship between knowledge about birth control and choice of birth control, it was found that the subjects who had a low level of knowledge about birth control used permanent birth control less than others (15%), and the subjects tended to use more permanent birth control when their knowledge of birth control was higher (Table 10). A statistical analysis revealed that the knowledge about birth control was associated with choice of birth control with statistical significance at the 0.05 level. This agreed with the study of Somsamai Marak (16) which found that knowledge about birth control was associated with postpartum sterilization. In other words, females with higher knowledge of birth control tended to choose postpartum sterilization more than others, accounting for 53.2%. One explanation is that the study of Somsamai Marak was conducted in a rural area just like the present study, so there may have been similar patterns of information distribution and dissemination of knowledge about family planning. In addition, as many as 71% of postpartum subjects completed elementary education, so it may be the case that the subjects who chose different means of birth control had different knowledge concerning birth control. In the present study, only 15% of the subjects who had a low level of knowledge about birth control chose permanent birth control. This group of subjects actually needed more information about means of birth control so that they could help disseminate the knowledge about birth control.

1.8 Beliefs in rumors About 60.3% of the subjects had beliefs in rumors at a moderate level. (Table 3). When considering the relationship between beliefs in rumors and means of birth control, it was found that the female subjects who had beliefs in rumors at a moderate level used permanent birth control less, accounting for 22.7%, and the subjects chose more permanent birth control when their scores of beliefs in rumors were higher, or when they had higher beliefs in rumors that were proven to be true (Table 10). A statistical analysis revealed that beliefs in rumors were associated with the subjects' choice of birth control with statistical significance at the 0.05 level. This was in congruence with the study of Wilailuck Pariyachatkul (7) which found that the female

subjects who had correct beliefs underwent sterilization operation more than the subjects with beliefs at a moderate level or those with false beliefs. In the present study, more than half of the subjects, or 56.9%, wrongly believed that "Continuously having contraceptive injections led to headache and irregular heartbeats," followed by 51.4% who believed that "After the sterilization operation, it was impossible to work hard or exert energy." Therefore, health officials should find ways to disseminate correct knowledge and understanding regarding birth control and family planning through various forms of media so that the married couples will no longer believe in false rumors and be able to choose the most appropriate means of birth control for themselves.

1.9 Experience with birth control Almost all of the subjects, or 94.8%, used some form of birth control before this pregnancy. (Table 5). When considering means of birth control, it was found that 76.4% used contraceptive pills, 60.7% used contraceptive injection, while 4.7% counted the safety periods and another 4.7% used withdrawal (Table 6). When considering the subjects' satisfaction with the last method of birth control, it was found that most of the subjects, or 82.9%, were satisfied (Table 6). Also, when considering the problems derived from using the last method of birth control, it was revealed that as many as 81.8% of the subjects did not have any problem (Table 6). Finally, when considering the relationship between experience with birth control and choice of birth control, it was found that the subjects who had never had any experience with birth control tended to use more permanent birth control than did the subjects who had had such experience, accounting for 35.7% and 31.3%, respectively (Table 10). A statistical analysis revealed that the subjects' previous experience with birth control was not associated with methods of birth control used. This finding was similar to the finding of Yuwadee Witayapun (14). This may be because there could be many factors that affected the subjects' decision of birth control. The subjects who had never used birth control decided to have permanent birth control more than those who had used birth control before, and this may have resulted from the fact that most of the subjects who had used birth control before taking part in this study never had problems with birth control. Only a small percentage, or 18.2%, who used the last method had had some problems

(Table 7). The lack of problems with the birth control methods previously used may have influenced the subjects to use the same birth control methods they had used before. However, it is deemed necessary to disseminate knowledge regarding family planning among females subjects who no longer needed children or who did not want children at present but wanted to have more children later on in life. Emphasis should be placed on the efficiency of different birth control methods so that the married couples would realize the errors that may occur and select the most appropriate birth control method for themselves.

2. The relationship between enabling factors and choice of birth control

2.1 Satisfaction with birth control facility More than half of the subjects, or 64%, sought temporary birth control services from the Public Health Centers, primarily because of convenience in traveling. When considering the relationship between satisfaction with birth control facility and choice of birth control, no significant relationship was found. (Table 10).

3. The relationship between reinforcing factors and choice of birth control

3.1 Support from related persons As regards support from related persons, it was found that about one-third of the subjects who had temporary birth control, or 33.7%, did not receive advice from anybody and made the decision themselves, followed by those who received persuasion and advice from healthcare staff, accounting for another 28.6%. A statistical analysis revealed that there was no relationship between support from related persons and choice of birth control (Table 12). This was congruent with the study of Anna Wongkularb (15). This may be because the subjects were government officials or public enterprise employees (Table 10) and were highly educated with their own income, so they could make their own decision. Also, the issues of women's right had received great attention from society, making these women to be even more self-reliant.

When considering the advice or persuasion to have sterilization operation, it was found that about half, or 54.1%, of the subjects received such advice or persuasion. For these subjects, 52.2% received advice or persuasion from neighbors, while 47.1% received advice or persuasion from public health officials (Table 8). According to the interviews, the individuals who advised or persuaded the subjects to have birth control were their siblings or relatives whom these postpartum subjects trusted and confided in, and they had undergone sterilization operation themselves rather than public health officials who were able to provide accurate information. Thus, additional knowledge and information should be offered to the females who already had permanent birth control so that they could give the information to other females in their circle. When considering the relationship between advice and persuasion to have birth control and choice of birth control, it was found that the subjects who received advice and persuasion chose permanent birth control more than the subjects who never received such advice and persuasion, accounting for 35.9% and 26.2%, respectively. A statistical analysis revealed that there was no association between advice and persuasion to have birth control received and choice of birth control (Table 12). This was similar to the finding of Yuwadee Witayapun (14) which showed that the advice received was not related to decision to undergo sterilization operation. This may be because most of the persons who persuaded the subjects to have sterilization operation were female neighbors who had been sterilized and may have lacked correct knowledge and understanding about sterilization. Therefore, they may not be able to give correct advice, making the female subjects who received advice lose confidence in permanent birth control.

When considering the husbands' support in choosing permanent birth control, it was found that 94.4% of the subjects who had permanent birth control received support from their spouses. For those who had temporary birth control, 54.6% of them did not receive support from their husbands to have permanent birth control (Table 9). A statistical analysis suggested that the husbands' support was associated with choice of birth control with statistical significance at the 0.001 level (Table 12). This finding agreed with the finding of Yuwadee Witayapun (14). It could be explained that the female subjects whose husbands encouraged them to have permanent birth control chose

permanent birth control more because family planning including the number of children in the family and choice of birth control methods was an issue which required mutual agreement between the married couples. However, it was also found that 51.1% of the female subjects whose husbands encouraged permanent birth control chose to have temporary birth control instead. Evidently, this group of subjects needed further advice regarding permanent birth control.

4. Discussion of the analysis of the factors predicting choice of birth control

A Stepwise multiple regression analysis was conducted using Wilk's technique to select individual variables to enter the equation one by one. That is, the individual variable which could best describe the dependent variable was chosen to enter the equation first, followed by the second-best variable which was entered into the equation to revise the power of the equation and so on (Table 13). In each step, the variable previously chosen might be omitted if it was found that it did not increase the predicting power of the equation. In the present study, it was found that among all eleven individual variables, there were only four variables which influenced the choice of birth control. The individual variable with the highest predicting power affecting the female subjects' choice of permanent or temporary birth control was the husbands' support, which was followed by knowledge about birth control, age, and beliefs in rumors, all of which accounted for 74.1% of the total variance (Table 16). This was consistent with the consideration of the quality of the equation which was found to have the predicting power at a moderate level (Table 15).

Therefore, this finding led to a conclusion that the husbands played an important role in the female subjects' choice of birth control. That is, the female subjects whose husbands supported them to have permanent birth control chose permanent birth control more than the female subjects whose husbands did not offer such support (Table 12). One important reason why the husbands did not encourage the female subjects to have permanent birth control was that they needed more children. However, one limitation of the present study was that the data were gathered only from the female subjects, so there

was no data regarding the husbands' reasons why they did not want their wives to have permanent birth control even though they had enough children. Further investigation is definitely called for to shed more light on this particular issue.

CHAPTER VI

CONCLUSION AND SUGGESTIONS

Conclusion

The present research was a cross-sectional study investigating predisposing factors, enabling factors, and reinforcing factors, as well as the factors affecting the postpartum subjects' choice of birth control after having at least two children at Amnajcharoen Hospital. The research instrument was a questionnaire developed by the researcher based on a review of related literature and research and validated by three experts in the field to ensure its reliability and validity. The subjects were 290 postpartum mothers who were recovering within 24 hours after childbirth at the maternity and special maternity wards of Amnajcharoen Hospital, Amnajcharoen Province, during February 16 to April 30, 2003. Among these subjects, 90 or 31% chose to have permanent birth control, while 196 or 67.6% chose temporary birth control. There were four subjects, or 1.4%, who did not choose any means of birth control. Data were analyzed using descriptive statistics of percentage, mean, and standard deviation. In addition, Chi-square test, Pearson's Contingency Coefficient (C), and discriminant analysis were used to determine the factors affecting choice of birth control.

The research findings can be concluded as follows:

1. The subjects' demographic characteristics

The findings revealed that the subjects ranged in age from 19 to 44 years old. A little more than one-third, or 38.3%, were between 25 and 29 years old. More than half, or 51%, were agriculturists, and close to three-quarters, or 71%, completed primary education. In terms of income, the subjects' average family income was 4,087.41 baht per

month. Moreover, 65.5% of wanted to have two children, and 73.1% had two living children. As regards birth control, 42.1% had knowledge about birth control at a moderate level, and 60.3% had beliefs in rumors about birth control at a moderate level. Almost all of the subjects, or 94.8%, had used birth control methods in the past. Among these, 76.4% used contraceptive pills, and 64% sought services from public health centers.

2. An analysis of the relationship between predisposing, enabling, and reinforcing factors and choice of birth control

1.1 Predisposing factors

Age More than half of the female subjects aged between 35 and 39 years, or 53.3%, chose permanent birth control more than the subjects in any other age group. For the subjects who were not older than 24 years old, on the other hand, used least permanent birth control, making up only 16% (Table 10). A statistical analysis indicated that the age of the female subjects was associated with choice of birth control with statistical significance. Thus, Hypothesis One was accepted.

Occupation It was found that among the subjects who chose permanent birth control, three-quarters were government officials or public enterprise employees. On the other hand, 77.8% of those who chose temporary birth control were housewives (Table 10). A statistical analysis revealed that the subjects' occupation was associated with their choice of birth control with statistical significance. Therefore, Hypothesis One was accepted.

Educational background It was found that 31.5% and 31.3% of the subjects who completed elementary education and those who had higher levels of education chose permanent birth control (Table 10). A statistical analysis indicated that the subjects' educational background was not associated with choice of birth control. Thus, this finding did not support Hypothesis One.

Family income The finding of this study showed that the higher the family income, the more likely the subjects chose permanent birth control. About 52.4% of the

subjects chose permanent birth control when their family income was higher than 8,000 baht per month (Table 10). A statistical analysis suggested that family income was associated with the subjects' choice of birth control with statistical significance; thus, Hypothesis One was supported.

Ideal number of children The subjects who wanted to have two children chose permanent birth control more than others, accounting for 37%. The higher the ideal number of children, the less likelihood the subjects would choose permanent birth control (Table 10). According to a statistical analysis, the ideal number of children was statistically significantly related to choice of birth control, which supported Hypothesis One.

Number of living children The subjects who had three living children used more permanent birth control, making up 42.2% (Table 10). According to a statistical analysis, the number of living children was not associated with choice of birth control. Thus, this finding did not support Hypothesis One.

Knowledge about birth control The subjects with a high level of knowledge about birth control would choose permanent birth control more, accounting for 63.5%. On the contrary, the subjects with a low level of knowledge about birth control used permanent birth control least, making up 15% (Table 10). A statistical analysis suggested that knowledge about birth control was associated with choice of birth control with statistical significance. Thus, Hypothesis One was supported by this finding.

Beliefs in rumors It was found that the subjects with the correct beliefs used more permanent birth control, accounting for 45% of the total, while the subjects with beliefs in rumors at a moderate level used permanent birth control less than any other group of subjects, making up 22.7% (Table 10). According to a statistical analysis, beliefs in rumors were associated with choice of birth control with statistical significance, thus lending support to Hypothesis One.

Experience with birth control It was found that the subjects who had never used any form of birth control used permanent birth control more than others, accounting for 35.7% (Table 10). A statistical analysis indicated that previous experience with birth

control was not associated with choice of birth control, which did not lend support to Hypothesis One.

1.2 Enabling factor

Satisfaction with birth control facility It was found that the largest group of subjects who chose permanent birth control, or 34.6%, chose birth control facility based on satisfaction derived from the staff members' friendliness and willingness to give advice (Table 11). However, a statistical analysis suggested that satisfaction with birth control facility was not associated with choice of birth control. Thus, this finding did not support Hypothesis Two.

1.3 Reinforcing factor

Support from related persons In this study, the largest group of subjects who had permanent birth control, or 33.7%, made the decision themselves without advice from others, while 29.4% received support from their husbands (Table 12). According to a statistical analysis, support from related persons was not associated with choice of birth control. Therefore, Hypothesis Three was not supported. Also, it was found that the subjects who were persuaded or advised to have a sterility operation chose permanent birth control more than others, accounting for 35.9% (Table 12). A statistical analysis revealed that advice and persuasion regarding sterility operation was not associated with choice of birth control. Again, Hypothesis Three was not supported.

Support from husbands The finding of this study showed that the subjects whose husbands supported them to have a sterility operation chose more permanent birth control than those who did not receive such support from their husbands, making up 48.9% and 4.5%, respectively (Table 12). According to a statistical analysis, support from husbands was associated with choice of birth control with statistical significance. Thus, Hypothesis Three was supported.

In conclusion, as regards factors associated with choice of birth control methods, the Chi-square test indicated that the predisposing factors which were statistically

significantly associated with the choice of birth control of the female subjects with at least two living children with statistical significance were age, occupation, family income, ideal number of children, knowledge about birth control, and beliefs in rumors. The reinforcing factor with such association was support from the husbands.

The predisposing factors which were not related to the choice of birth control of female subjects with at least two living children were educational background, number of living children, and experience with birth control. The enabling factor which no such association was satisfaction with birth control facility, while the reinforcing factors with no such association were support from related persons and persuasion and advice to have a sterility operation.

3. An analysis of factors affecting choice of birth control after childbirth

A discriminant analysis was conducted and the finding revealed that there were only four factors which influenced the choice of birth control of postpartum mothers with at least two living children were support from husbands, knowledge about birth control, age, and beliefs in rumors (Table 14). The discriminant equation indicated that the group membership was adequately predicted (with the canonical correlation equal to 0.565) with the discriminating power at a moderate level (with Wilk's Lamda equal to 0.681). The equation could accurately predict 74.1% of the group membership.

Suggestions for Further Research

1. Suggestions based on the findings of the present research

1.1 The findings of this study revealed that support of the husbands for permanent birth control was the most influential factor affecting the subjects' choice of birth control (Table 14). For the subjects who had permanent birth control, most of them received support from their husbands. On the other hand, most of the subjects who chose temporary birth control did not receive such support from their husbands (Table 12). Therefore, based on this finding, it is recommended that when providing advice regarding family planning and birth control, particularly permanent birth control, both the husbands

and wives should be present. Similarly, when the pregnant women come to see the doctor for regular check-ups, knowledge should be given to both the husbands and the wives to enable them to have correct understanding about the importance of limiting the size of the family and the advantages and disadvantages of a sterility operation. This is because the findings of this study revealed that most of the individuals who persuaded the subjects to be sterilized were neighbors (Table 9). Thus, to eliminate the sources of false rumors about sterility, such as sterility resulting in unfavorable changes in both physical and mental conditions, dissemination of knowledge about sterility is deemed necessary as soon as the women become pregnant so that they would have sufficient amount of time to contemplate on both the advantages and disadvantages and to seek additional information before making the decision. They should also have a chance to talk to public health officials to make a better plan regarding the number of children they want to have.

1.2 It is recommended that knowledge about female sterilization should be disseminated among the female population, especially those with a low level of knowledge regarding birth control so that they will have correct understanding about sterilization, especially self-care practice before and after the operation, so that they would have both physical and mental readiness. Further, they could later help disseminate information among women who seek knowledge of birth control.

1.3 The findings revealed that older subjects tended to choose permanent birth control more than younger subjects. However, there were some subjects who were older than 35 years old with more than two children who still used temporary birth control. As they already had enough children, this group of subjects should be encouraged to have permanent birth control. For this reason, knowledge regarding problems caused by having too many children should be disseminated among this older group of subjects so that they may choose permanent birth control more.

1.4 In this study, it was found that correct beliefs in rumors were associated with methods of birth control. Thus, public health officials should find ways and utilize appropriate media to continuously publicize the benefits of birth control so that the married couples will have correct knowledge and understanding of birth control, leading to their proper choice of birth control and family planning.

2. Recommendations for future research

2.1 The present study found that some the subjects became pregnant even though their husband ejaculated outside their body. The interviews of these subjects showed that some of the subjects had the ideal number of children, while others had more children than they initially needed. Therefore, a study should be conducted to investigate factors which affect unwanted or unplanned pregnancy by comparing the subjects who have ideal number of children and those who have children more than they need.

2.2 The findings of this study indicated that the husbands' support was associated with and influenced the subjects' choice of permanent birth control. However, this study did not gather information from the husbands, so in the future, qualitative data should be collected from the husbands to zoom in on the underlying reasons why the husbands have such ideas and beliefs.

2.3 The present study did not cover a number of factors which may have affected the female subjects' choice of birth control such as the birth control services available, service system, service providers, types of advice given. These factors should be examined in further studies to determine whether they affect the subjects' decision to choose permanent birth control or not.

REFERENCES

1. มหาวิทยาลัยมหิดล. สารประชากร. สถาบันวิจัยประชากรและสังคม ปีที่ 10 ฉบับวันที่ 1 กรกฎาคม 2544.
2. บุญเลิศ เลี้ยวประไพ. การปฏิวัติทางประชากร. เอกสารประกอบการบรรยายในการประชุมวิชาการระดับชาติ เรื่อง การปฏิวัติทางประชากรไทยเนื่องในโอกาสครบรอบยี่สิบปี นโยบายประชากร ณ หอประชุมจุฬาลงกรณ์มหาวิทยาลัย กรุงเทพมหานคร ; 2533.
3. อภิชาติ จำรัสฤทธิรงค์ และคณะ. การสำรวจภาวะคุมกำเนิดในประเทศไทย พ.ศ. 2539. กรุงเทพมหานคร : สถาบันวิจัยประชากรและสังคม มหาวิทยาลัยมหิดล ; 2540.
4. กองอนามัยครอบครัว. กรมอนามัย แผนงานวางแผนครอบครัว. กรุงเทพมหานคร : กระทรวงสาธารณสุข; 2534.
5. กองอนามัยครอบครัว. โครงการประเมินผลงานอนามัยครอบครัวในแผนพัฒนาเศรษฐกิจและสังคมแห่งชาติ ฉบับที่ 7 . กรุงเทพมหานคร : กระทรวงสาธารณสุข ; 2539.
6. ตวงภาคร์ ธรรมพานิช, จิรี ลิ้มตระการ, อารี สมบูรณ์สุข, สุพร เกิดสว่าง. การส่งเสริมสุขภาพมารดาไทยโดยการวางแผนครอบครัว ภายหลังการคลอดบุตรที่โรงพยาบาล 4 แห่ง ในประเทศไทย. รายงานการสัมมนาทางวิชาการแห่งชาติ เรื่อง ประชากรของประเทศไทย ครั้งที่ 3 สำนักงานคณะกรรมการวิจัยแห่งชาติ กรุงเทพมหานคร ; 2511.
7. วิไลลักษณ์ ปริยฉัตรกุล. ปัจจัยที่มีอิทธิพลต่อการใช้วิธีคุมกำเนิดถาวร และชนิดชั่วคราวในกลุ่มสตรีหลังคลอดที่มีบุตรมีชีวิต 2 คนขึ้นไป ที่ศูนย์ส่งเสริมสุขภาพเขต 6 จังหวัดนครสวรรค์. วิทยานิพนธ์ปริญญาวิทยาศาสตรมหาบัณฑิต สาขาการเจริญพันธุ์ และวางแผนประชากร มหาวิทยาลัยมหิดล ; 2535.
8. โรงพยาบาลอำนาจเจริญ. สรุปสถิติรายงานผู้รับบริการวางแผนครอบครัว ฝ่ายวางแผนครอบครัว โรงพยาบาลอำนาจเจริญ ; 2545.

9. ประภาเพ็ญ สุวรรณ. ทัศนคติ : การวัดการเปลี่ยนแปลงพฤติกรรมอนามัย. พิมพ์ครั้งที่ 2. กรุงเทพมหานคร : สำนักพิมพ์โอเดียนสโตร์ ; 2536.

10. บุญเยี่ยม ตระกูลวงษ์. แนวคิด และรูปแบบการสอนสุขศึกษา เพื่อพัฒนาคุณภาพชีวิต. สัมมนาวิชาการสุขศึกษาแห่งชาติ ครั้งที่ 3 เรื่อง แนวทางดำเนินงานสุขศึกษา เพื่อพัฒนาคุณภาพชีวิต. ชลบุรี, โรงแรมเอเชียพัทยา, 2530 : 69 – 76.

11. Green LW, Kreuter MW, Deeds SG, Partridge KB. Health educational planning : A diagnotie approach. 1st ed. California : Mayfield Publishing Company, 1980 : 10 – 16, 68 – 86.

12. วิทูร โอสถานนท์. การสื่อสารให้ปฏิบัติวางแผนครอบครัวและประชากร. กรุงเทพมหานคร : โรงพิมพ์พระจันทร์ ; 2516 : 11, 27 – 28, 96, 129.

13. Nortman DL. Voluntary sterilization : Its demographic impact in relation to other contraceptive method. Paper No. 65. Honolulu : East – West Population Institute, 1980 : 13.

14. ยุวดี วิทยพันธ์. ปัจจัยที่มีความสัมพันธ์กับการตัดสินใจทำหมันหลังคลอดของสตรีที่มีบุตรมีชีวิตอย่างน้อย 2 คนขึ้นไป และมีบุตรเพียงพอแล้ว ในโรงพยาบาลรามาธิบดี. วิทยานิพนธ์ปริญญาวิทยาศาสตร์มหาบัณฑิต สาขาวิชาการเจริญพันธุ์และวางแผนประชากร. บัณฑิตวิทยาลัย มหาวิทยาลัยมหิดล ; 2538.

15. แอนนา วงษ์กุหลาบ. ปัจจัยที่มีความสัมพันธ์กับการเลือกใช้วิธีคุมกำเนิดของกลุ่มสตรีหลังคลอด ในโรงพยาบาลรามาธิบดี. วิทยานิพนธ์ปริญญาวิทยาศาสตร์มหาบัณฑิต สาขาการเจริญพันธุ์และวางแผนประชากร. บัณฑิตวิทยาลัย มหาวิทยาลัยมหิดล ; 2537.

16. สมสมัย มารักษ์. ปัจจัยที่มีอิทธิพลต่อการตัดสินใจทำหมันหลังคลอดของสตรีที่มีบุตร 2 คนขึ้นไป ที่โรงพยาบาลกาญจนบุรี. วิทยานิพนธ์ปริญญาวิทยาศาสตร์มหาบัณฑิต สาขาการเจริญพันธุ์และวางแผนประชากร. บัณฑิตวิทยาลัย มหาวิทยาลัยมหิดล ; 2534.

17. สุวัฒนา วิบูลย์เศรษฐ์. พิชิต พิทักษ์เทพสมบัติ. ปัจจัยที่มีอิทธิพลต่อการเลือกใช้การทำหมันของคู่สมรส ในเขตชนบทภาคตะวันออกเฉียงเหนือ พ.ศ. 2530. เอกสารสถาบัน หมายเลข 159/31 สถาบันประชากรศาสตร์ จุฬาลงกรณ์มหาวิทยาลัย. กรุงเทพมหานคร ; 2531 : 14 – 32.

18. พิชิต พิทักษ์เทพสมบัติ, สุวัฒนา วิบูลย์เศรษฐ์. ปัจจัยที่มีอิทธิพลต่อการเลือกใช้การทำหมันของคู่สมรส ในเขตชนบทภาคใต้ พ.ศ. 2531. เอกสารสถาบัน หมายเลข 160/31 สถาบันประชากรศาสตร์ จุฬาลงกรณ์มหาวิทยาลัย. กรุงเทพมหานคร ; 2531 : 14 – 36.
19. อนงค์นิตย์ ตรงวัฒนาวุฒิ. คุณลักษณะบางประการของสตรีที่ทำหมันเมื่อมีบุตร 2 คน ในจังหวัดสกลนคร.วิทยานิพนธ์ปริญญาวิทยาศาสตรมหาบัณฑิต สาขาการเจริญพันธุ์และวางแผนประชากร. บัณฑิตวิทยาลัย มหาวิทยาลัยมหิดล ; 2532.
20. วิมลรัตน์ ภูผาสุข. ปัจจัยที่มีผลต่อการเลือกใช้ และระยะเวลาที่เริ่มใช้การคุมกำเนิดของสตรีภายหลังการคลอดบุตร. วิทยานิพนธ์ปริญญาสังคมศาสตรมหาบัณฑิต สาขาวิจัยประชากรและสังคม.บัณฑิตวิทยาลัย มหาวิทยาลัยมหิดล ; 2532.
21. เทียนฉาย กีระนันทน์. เศรษฐศาสตร์ประชากร. กรุงเทพมหานคร : โรงพิมพ์จุฬาลงกรณ์มหาวิทยาลัย ; 2526 : 175 – 182.
22. ธงชัย มั่นคง. กระบวนการยอมรับและปัจจัยที่มีผลต่อกระบวนการยอมรับการทำหมันของคนงานในโรงงานอุตสาหกรรม จังหวัดสมุทรปราการ. วิทยานิพนธ์ปริญญาศึกษาศาสตรมหาบัณฑิต สาขาประชากรศึกษา. บัณฑิตวิทยาลัย มหาวิทยาลัยมหิดล ; 2534.
23. เรณู ช้างปุก. อิทธิพลของครอบครัวและเครือญาติต่อการตัดสินใจเข้ามาใช้บริการวิธีคุมกำเนิดชนิดห่วงอนามัยของสตรีวัยเจริญพันธุ์ ในภาคตะวันออกเฉียงเหนือ. วิทยานิพนธ์ปริญญาสังคมศาสตร มหาบัณฑิต สาขาสังคมศาสตร์การแพทย์และสาธารณสุข. บัณฑิตวิทยาลัย มหาวิทยาลัยมหิดล ; 2529.
24. อัจฉรา มาศมาลัย. ปัจจัยที่มีอิทธิผลต่อการเลือกใช้วิธีคุมกำเนิดในกลุ่มสตรีที่ไม่ต้องการบุตรเพิ่มในประเทศไทย. วิทยานิพนธ์ปริญญาสังคมศาสตรมหาบัณฑิต สาขาวิจัยประชากรและสังคม.บัณฑิตวิทยาลัย มหาวิทยาลัยมหิดล ; 2532.
25. สายสุทธี สุนทรานนท์. ปัจจัยที่มีอิทธิผลต่อการทำหมันชายในเขตชนบท จังหวัดลำปาง ระหว่างปี พ.ศ.2529 - 2533. วิทยานิพนธ์ปริญญาวิทยาศาสตรมหาบัณฑิต สาขาการเจริญพันธุ์และวางแผนประชากร. บัณฑิตวิทยาลัย มหาวิทยาลัยมหิดล ; 2534.

26. มะลิ ลิวนานนท์ชัย. การศึกษาสถิติการกระจาย และการเข้าถึงบริการวางแผนครอบครัวในประเทศไทย จากการสำรวจตัวกำหนด และผลของแบบแผนการใช้วิธีคุมกำเนิดในประเทศไทย พ.ศ.2530. สถาบันวิจัยประชากรและสังคม มหาวิทยาลัยมหิดล เอกสารหมายเลข 134. กรุงเทพมหานคร ; 2530.
27. ประภาเพ็ญ สุวรรณ, สวิง สุวรรณ. พฤติกรรมศาสตร์ พฤติกรรมสุขภาพ และสุขศึกษา. คณะสาธารณสุขศาสตร์ มหาวิทยาลัยมหิดล. กรุงเทพมหานคร ; 2532.
28. นันทนา คงนันทะ. ปัจจัยที่มีอิทธิผลต่อการทำหมันหลังคลอดของสตรีที่มีบุตรตั้งแต่ 3 คนขึ้นไป ในโรงพยาบาลเขตจังหวัดบุรีรัมย์. วิทยานิพนธ์ปริญญาวิทยาศาสตรมหาบัณฑิต สาขาการเจริญพันธุ์และวางแผนประชากร. บัณฑิตวิทยาลัย มหาวิทยาลัยมหิดล ; 2531.
29. สุจิตต์ มีมงคลกุลดิลก. ปัจจัยที่มีความสัมพันธ์กับการที่สตรีไม่มารับบริการผ่าตัดทำหมันแห้งตามระยะเวลาที่กำหนด. วิทยานิพนธ์ปริญญามหาบัณฑิต สาขาสังคมศาสตร์การแพทย์. บัณฑิตวิทยาลัย มหาวิทยาลัยมหิดล ; 2524.
30. Cochran WG. Sampling Techinques. 3rd ed. New York : John wiley & Sons Inc, 1977 : 75 – 76.
31. เสรี ลาชโรจน์.หลักเกณฑ์และวิธีการวัดและการประเมินผลการศึกษาในโรงเรียน.เอกสารการสอนชุดวิชาการบริหารและการจัดการ การวัดและประเมินผลการศึกษา,หน่วยที่ 1-7 . กรุงเทพมหานคร :มหาวิทยาลัยสุโขทัยธรรมาธิราช ;2537.
32. World Health Organization. Female Sterilization: A guide to provision of Services. Geneva : World Health Organization, 1992: 1-4, 9 -10, 14 -22, 60 -61, 99, 120.

APPENDIX

แบบสัมภาษณ์
เรื่อง

ปัจจัยที่มีความสัมพันธ์กับการเลือกใช้วิธีการคุมกำเนิดของกลุ่มสตรีหลังคลอด
ที่มีบุตรมีชีวิตอย่างน้อย 2 คนขึ้นไป ในโรงพยาบาลอำนาจเจริญ

ชื่อผู้ให้สัมภาษณ์……..…….H.N……

ส่วนที่ 1 ข้อมูลทั่วไป

1. ปัจจุบันท่านมีอายุ……...ปี

2. ปัจจุบันท่านมีบุตรมีชีวิต (รวมบุตรที่เพิ่งคลอดด้วย)……คน

3. การศึกษาขั้นสูงสุดของท่าน คือ…….
4. รายได้ก่อนหักค่าใช้จ่ายของครอบครัว (รวมของสามี)
   ประมาณเดือนละ……..บาท

5. ปัจจุบันท่านประกอบอาชีพหลัก คือ
   - [ ] 1 ค้าขาย
   - [ ] 2 รับราชการ รัฐวิสาหกิจ
   - [ ] 3 พนักงาน ลูกจ้าง (รายเดือน)
   - [ ] 4 รับจ้าง (รายวัน)
   - [ ] 5 เกษตรกรรม
   - [ ] 6 แม่บ้าน
   - [ ] 7 อื่นๆ ระบุ……
6. สมมติว่าท่านเพิ่งแต่งงาน และยังไม่มีบุตรเลย
   ท่านคิดว่าจะมีบุตร……..คน

7. ตอนนี้ท่านยังต้องการมีบุตรเพิ่มอีกหรือไม่
   - [ ] ต้องการ จำนวน……...คน
   - [ ] ไม่ต้องการ
   - [ ] ไม่แน่ใจ

ส่วนที่ 2 ความรู้เกี่ยวกับวิธีคุมกำเนิด

1. การคุมกำเนิดด้วยวิธีนับระยะปลอดภัย คือ
   [ ] 1 การงดร่วมเพศในขณะเป็นประจำเดือน
   [ ] 2 การงดร่วมเพศในช่วงเวลาที่มีไข่ตก
   [ ] 3 การงดร่วมเพศในวันใดก็ได้ที่ไม่เป็นประจำเดือน
   [ ] 4 ไม่ทราบ

2. ระหว่างการคุมกำเนิดด้วยวิธีนับระยะปลอดภัย กับการทำหมัน วิธีใดเป็นวิธีที่ป้องกันการตั้งครรภ์ที่ได้ผลดีที่สุด
   [ ] 1 พอ ๆ กัน [ ] 2 การนับระยะปลอดภัย
   [ ] 3 การทำหมัน [ ] 4 ไม่ทราบ

3. เวลาที่เหมาะสมในการเริ่มต้นกินยาเม็ดคุมกำเนิด ในแผงแรก คือ
   [ ] 1 ก่อนเป็นประจำเดือน [ ] 2 ขณะเป็นประจำเดือน
   [ ] 3 หลังการร่วมเพศ [ ] 4 ไม่ทราบ

4. ในสตรีที่คุมกำเนิดด้วยยาเม็ดคุมกำเนิด จำเป็นต้องกินยาทุกวันหรือไม่ (ถ้าไม่มีการร่วมเพศ)
   [ ] 1 ต้องกินทุกวัน [ ] 2 ไม่จำเป็นต้องกินทุกวัน
   [ ] 3 ไม่ทราบ

5. ถ้าสตรีที่ใช้ยาเม็ดคุมกำเนิดลืมกินยา ในตอนเย็นเมื่อวานนี้ และมานึกได้ในตอนเช้าวันรุ่งขึ้น ควรปฏิบัติตามข้อใด จึงจะมีผลดีในการป้องกันการตั้งครรภ์
   [ ] 1 กินยาเม็ดที่ลืมทันทีที่นึกได้ [ ] 2 รอกินยาในตอนเย็น 1 เม็ด
   [ ] 3 รอกินยาในตอนเย็น 2 เม็ด [ ] 4 ไม่ทราบ

6. ยาฉีดคุมกำเนิดเข็มหนึ่ง สามารถป้องกันการตั้งครรภ์ได้นานเท่าไร
   [ ] 1 นาน 2 เดือน [ ] 2 นาน 3 เดือน
   [ ] 3 นาน 4 เดือน [ ] 4 ไม่ทราบ

7. ผู้ที่ฉีดยาคุมกำเนิดมาหลายปี จะทำให้เป็นหมันได้หรือไม่
   [ ] 1 ได้ [ ] 2 ไม่ได้

[ ] 3 ไม่ทราบ

8. เวลาที่เหมาะสมในการเริ่มต้นฉีดยาคุมกำเนิดเข็มแรกคือ

[ ] 1 ก่อนเป็นประจำเดือน 5 วัน [ ] 2 ขณะเป็นประจำเดือน

[ ] 3 ก่อนการร่วมเพศ [ ] 4 ไม่ทราบ

9. การใส่ห่วงอนามัยเป็นการคุมกำเนิดชนิดใด

[ ] 1 ชนิดถาวร ทำครั้งเดียวได้ผลตลอดไป

[ ] 2 ชนิดชั่วคราว

[ ] 3 ไม่ทราบ

10. เมื่อใส่ห่วงอนามัย ห่วงจะป้องกันการตั้งครรภ์ได้เมื่อใด

[ ] 1 ทันทีที่ใส่ [ ] 2 หลังใส่ห่วง 10 วัน

[ ] 3 หลังใส่ห่วง 1 เดือน [ ] 4 ไม่ทราบ

11. เวลาที่เหมาะสมในการใส่ห่วงอนามัยคือ

[ ] 1 ก่อนเป็นประจำเดือน 5 วัน [ ] 2 ขณะเป็นประจำเดือน

[ ] 3 ก่อนการร่วมเพศ [ ] 4 ไม่ทราบ

12. เมื่อใส่ห่วงอนามัยแล้ว ห่วงอนามัยจะป้องกันการตั้งครรภ์ได้นานเท่าใด

[ ] 1 นาน 1 ปี [ ] 2 นาน 3 ปี

[ ] 3 นานตลอดไป [ ] 4 ไม่ทราบ

13. การทำหมันหญิง คือ

[ ] 1 การตัดมดลูกทิ้ง [ ] 2 การตัดปากมดลูกออกแล้วเย็บปิด

[ ] 3 การผูกและตัดท่อนำไข่ทั้ง 2 ข้าง [ ] 4 ไม่ทราบ

14. การทำหมันหญิงสามารถทำได้ในระยะใด

[ ] 1 ในระยะปกติเท่านั้น

[ ] 2 ในระยะหลังคลอดเท่านั้น

[ ] 3 ทั้งในระยะหลังคลอดและระยะปกติ

[ ] 4 ไม่ทราบ

15. ภายหลังจากทำหมันชายแล้ว ฝ่ายชายจะเป็นหมันเมื่อใด

[ ] 1 เป็นหมันทันที [ ] 2 หลังทำหมันแล้ว 1 เดือน

[ ] 3 หลังทำหมันแล้ว 3 เดือน [ ] 4 ไม่ทราบ

16. การทำหมันเป็นวิธีการคุมกำเนิดที่ป้องกันการตั้งครรภ์ได้นานเท่าใด

[ ] 1 นาน 1 ปี [ ] 2 นาน 3 ปี

[ ] 3 นานตลอดไป [ ] 4 ไม่ทราบ

17. การทำหมันหญิงสามารถป้องกันการตั้งครรภ์ได้มากกว่า หรือน้อยกว่าการคุมกำเนิดชนิดชั่วคราว (ยาเม็ดคุมกำเนิด ยาฉีดคุมกำเนิด ห่วงอนามัย ฯลฯ)

[ ] 1 น้อยกว่า [ ] 2 พอ ๆ กัน

[ ] 3 มากกว่า [ ] 4 ไม่ทราบ

18. หลังทำหมันหญิงแล้ว ยังมีประจำเดือนมาตามปกติหรือไม่

[ ] 1 ไม่มี

[ ] 2 มีตามปกติเหมือนเดิม

[ ] 3 ไม่ทราบ

19. หลังการทำหมันหลังคลอด ควรพักฟื้นนานเท่าใด จึงสามารถทำงานทุกอย่างได้ตามปกติ

[ ] 1 1 สัปดาห์ [ ] 2 6 สัปดาห์

[ ] 3 ไม่ทราบ

20. หลังการทำหมันหลังคลอดนานเท่าใด จึงสามารถมีเพศสัมพันธ์ได้

[ ] 1 1 สัปดาห์ [ ] 2 6 สัปดาห์

[ ] 3 ไม่ทราบ

ส่วนที่ 3 ข้อมูลด้านความเชื่อเกี่ยวกับการคุมกำเนิด

ท่านมีความคิดเห็นอย่างไรเกี่ยวกับข้อความต่อไปนี้

ข้อความ	เชื่อ	ไม่แน่ใจ	ไม่เชื่อ
1. กินยาเม็ดคุมกำเนิดทำให้เป็นมะเร็งเต้านม			
2. ฉีดยาคุมกำเนิดนาน ๆ ทำให้ใจสั่น ปวดศีรษะ			
3. หลังถอดห่วงแล้ว จะทำให้มีลูกยาก หรือเป็นหมันได้			
4. วิธีการหลั่งภายนอกใช้บ่อยจะทำให้เป็นคนหงุดหงิดง่าย			
5. ทำหมันหญิงแล้วทำให้อ้วนขึ้น			
6. ผู้หญิงที่ทำหมัน จะมีความต้องการทางเพศสูงขึ้น			
7. หลังทำหมันแล้วทำงานหนักไม่ได้			
8. ผู้ชายที่ทำหมัน จะมีความต้องการทางเพศลดลง			
9. ทำหมันจะทำให้ความจำเสื่อมเป็นคนขี้ลืม			
10. การคุมกำเนิด คือ การป้องกันการตั้งครรภ์			
11. ถ้าลืมกินยาเม็ดคุมกำเนิดเมื่อวานนี้ ควรกินทันทีที่นึกได้			
12. ห่วงอนามัยจะออกฤทธิ์ ป้องกันการตั้งครรภ์ได้ทันทีที่ใส่			
13. ภายหลังที่สตรีทำหมันแล้ว จะยังคงมีความต้องการทางเพศเป็นปกติ			
14. ผู้ที่ไม่อยากมีบุตรอีก ควรทำหมันหญิง			
15. ใส่ห่วงอนามัยชนิดมีทองแดงแล้ว อาจทำให้ฟ้าผ่าตัวผู้ใส่ได้			
16. ห่วงอนามัยเป็นวิธีคุมกำเนิดที่สะดวกสบาย ใส่ครั้งเดียวมีผลคุมกำเนิดหลายปี			
17. การใส่ห่วงอนามัยไม่มีผลต่อการเลี้ยงลูกด้วยนมแม่			

ส่วนที่ 4 ข้อมูลด้านการวางแผนครอบครัว

1. ท่านเคยใช้วิธีคุมกำเนิดมาก่อนหรือไม่
   [ ] 0 ไม่เคย (ถ้าตอบว่าไม่เคย ให้ข้ามไปตอบคำถามข้อที่ 6)
   [ ] 1 เคย

2. ท่านเคยใช้วิธีใดบ้าง

[ ] 1 นับระยะปลอดภัย

[ ] 2 หลั่งนอกช่องคลอด

[ ] 3 ถุงยางอนามัย

[ ] 4 ยาเม็ดคุมกำเนิด

[ ] 5 ยาฉีดคุมกำเนิด

[ ] 6 ห่วงอนามัย

[ ] 7 ยาฝังคุมกำเนิด

[ ] 8 อื่น ๆ ระบุ……..

3. ท่านมีปัญหาอะไรบ้างหรือไม่ เกี่ยวกับการใช้วิธีคุมกำเนิดที่ผ่านมา

[ ] 1 ไม่มีปัญหา

[ ] 2 มีปัญหา โปรดระบุ……

4. ท่านรู้สึกพอใจวิธีคุมกำเนิด วิธีสุดท้ายที่ท่านใช้หรือไม่ (วิธี……..)

[ ] 1 ไม่พอใจ

[ ] 2 เฉย ๆ

[ ] 3 พอใจ

5. การเลือกตัดสินใจในข้อ 2 ท่านคิดว่าผู้ใดมีส่วนสนับสนุน

[ ] สามี

[ ] พ่อแม่ของตนเอง หรือของสามี

[ ] ญาติพี่น้อง เพื่อนฝูง

[ ] บุคลากรทางการแพทย์

[ ] ไม่มีใครแนะนำ (ตัดสินใจเอง)

[ ] อื่น ๆ (ระบุ)…….

6. หลังคลอดบุตรครั้งนี้ ท่านได้ตัดสินใจเลือก

[ ] คุมกำเนิด วิธี (ระบุ)……

[ ] ไม่คุมกำเนิด เพราะ (ระบุ)……..

7. สมมติว่าท่านจะทำหมัน ท่านคิดว่าสามีของท่านจะสนับสนุนให้ท่านทำหมันหรือไม่

[ ] 1 ไม่สนับสนุน

[ ] 2 สนับสนุน

8. ท่านเคยได้รับคำแนะนำ - ชักชวนให้ทำหมันจากใครหรือไม่

[ ] 1 ไม่เคย

[ ] 2 เคย จาก …….. (ตอบได้มากกว่า 1 ข้อ)

[ ] 1. วิทยุ ทีวี หนังสือพิมพ์ นิตยสาร แผ่นพับ โปสเตอร์

[ ] 2. สามี

[ ] 3. พ่อ – แม่ ญาติพี่น้อง

[ ] 4. ผสส. อสม. เจ้าหน้าที่สาธารณสุข

[ ] 5. เพื่อนบ้าน

[ ] 6. อื่น ๆ ระบุ……

<u>ส่วนที่ 5 ความพึงพอใจในสถานบริการคุมกำเนิด</u>

1. ท่านรับบริการคุมกำเนิดจากที่ใด

[ ] โรงพยาบาลอำนาจเจริญ

[ ] โรงพยาบาลอื่น ระบุ…….

[ ] คลินิก

[ ] ศูนย์สาธารณสุข

[ ] ร้านขายยา

[ ] อื่น ๆ ระบุ……

2. ท่านเลือกตัดสินใจดังกล่าวในข้อ 1 เพราะ

(โปรดใส่หมายเลข 1,2,3 หน้าข้อที่ท่านเห็นว่ามีเหตุผลต่อการตัดสินใจ จากมากไปหาน้อย)

[ ] ความสะดวกในการเดินทาง

[ ] ราคาเหมาะสม

[ ] เวลาอำนวย

[ ] สามารถรับบริการได้ง่าย

[ ] เจ้าหน้าที่ให้คำแนะนำและมีมนุษยสัมพันธ์ดี

[ ] อื่น ๆ (ระบุ)……..

ความคิดเห็น หรือข้อเสนอแนะ ต่อการบริการของโรงพยาบาลอำนาจเจริญ

……

……

……

BIOGRAPHY

NAME Mrs.Nunnapat Peeranunrungsri

DATE OF BIRTH 29 January 1968

PLACE OF BIRTH Ubonratchathani

INSTITUTIONS ATTENDED Mahidol University ,1991:

Bachelor of Nursing.

Mahidol University, 2003 :

Master of science.

(Human Reproduction and Population Planning)

Ramathibodi Hospital

POSITION & OFFICE Amnajcharoen Hospital,

Amnajcharoen, Thailand.

Position : Nurse

Tel. 045 511940

HOME ADDRESS 17-19-21 T. Naimuang

A.Muang

Ubonratchathani 34000

E-Mail mukjar@hotmail.com

Tel 045-241239