FACTORS ASSOCIATED WITH POSTPARTUM AND INTERVAL FEMALE STERILIZATION AT RAMATHIBOIDI HOSPITAL

MONSUPA KOMOLCHAN

A THESIS SUBMITTED IN PARTIAL FULFILLMENT
OF THE REQUIREMENTS FOR
THE DEGREE OF MASTER OF SCIENCE
(HUMAN REPRODUCTION AND POPULATION PLANNING)
FACULTY OF GRADUATE STUDIES
MAHIDOL UNIVERSITY
2005

ISBN 974-04-6029-1

Thesis
Entitled

FACTORS ASSOCIATED WITH POSTPARTUM AND INTERVAL FEMALE STERILIZATION AT RAMATHIBOIDI HOSPITAL

Miss Monsupa Komolchan
Candidate

Assoc.Prof Somsak Suthustvoravut,,
M.D., Dip.Thai Board of Ob. & Gyn.
Dip. Field Epidemiology (C.D.C.)
Major-Advisor

Asst. Prof .Sanya Patrachai,
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. Somsak Suthutvoravut,
M.D., Dip.Thai Board of Ob. & Gyn.
Dip. Field Epidimiology (C.D.C)
Chair
Master of Science Programme in
Human Reproduction and Population
Planning
Faculty of Medicine Ramathibodi
Hospital

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

Thesis
Entitled

FACTORS ASSOCIATED WITH POSTPARTUM AND INTERVAL FEMALE STERILIZATION AT RAMATHIBOIDI HOSPITAL

was submitted to the Faculty of Graduate Studies, Mahidol University
for the degree of Master of Science (Human Reproduction and Population Planning)
On
5 April, 2005

Miss Monsupa Komolchan
Candidate

Assoc. Prof Somsak Suthutvoravut,
M.D., Dip.Thai Board of Ob. & Gyn.
Dip.Field Epidemiology (C.D.C.)
Chair

Asst.Prof. Sanya Patrachai,
MD.,Dip.Thai Board of OB&Gyn
Member

Mrs.Kobkarn Mahuttano
M.Sc. (Human Reproduction and
Population Planning)
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

Rajata Rajatanavin,M.D.,F.A.C.E.
Professor of Medicine,
Dean ,Faculty of Medicine
Ramathibodi Hospital,
Mahidol University.

ACKNOWLEDGEMENT

This thesis would never have been completed without the support and advice of following persons to whom I would like to express my heartfelt thanks for their valuable help. I am very grateful for knowledge and experience that I have received from my major advisors, Associate Professor Somsak Suthatvoravut for all what he did with greatest patience. Although he was very busy at all time, he gave clear guidance and intellectual direction to my thesis.

I would like to express my great gratitude to Assistant Professor Sanya Patrachai, and Associate Professor Vajira Singhakajen, my co-advisor, for their valuable time that they had spent to help me and for their valuable suggestions. I would also like to thank my classmate for their cooperation, kindness and friendship that have made my studying years at Ramathiboidi hospital such a wonderful learning experience.

Finally, I received whole-heart encouragement and complete support from every one in my family and my friends. Without them this research could not have been completed.

Monsupa Komolchan

FACTORS ASSOCIATED WITH POSTPARTUM AND INTERVAL FEMALE STERILIZATION AT RAMATHIBODI HOSPITAL

MONSUPA KOMOLCHAN 4337626 RAHP/M

M.Sc.(HUMAN REPRODUCTION AND POPULATION PLANNING)

THESIS ADVISORS : SANYA PATRACHAI,M.D.(THAI BOARD OF OB & GYN.), SOMSAK SUTHUTVORAVUT, M.D.(THAI BOARD OF OB & GYN.), VAJIRA SINGHAKAJEN, B.A.(STAT.), LL.B.,M.A.

ABSTRACT

The objectives of this analytical observational research were to study the characteristics of women who underwent postpartum and interval female sterilization and the trend of female sterilization at Ramathiboidi hospital. Data was collected from the records of women who underwent sterilization at Ramathiboidi hospital. There were a total of 734 women, 635 who were sterilized during postpartum period and 99 who were sterilized when they were not pregnant nor after delivery (interval sterilization). The descriptive statistics used in this study were frequency, percentage, mean and standard deviation. Student t – test was used for hypothesis testing of association.

The results of the study showed that the characteristic of women, who underwent postpartum and interval sterilization were different. There was statistically significant association ($p < 0.05$) with the age of women , the number of parities, number of living children , number of daughters , and medical diseases. Women of postpartum sterilization were lower in age and history of medical diseases but higher in number of parities, number of living children , number of daughters. Duration of operation was significantly less in cases of postpartum sterilization than in interval sterilization. The number of postpartum sterilizations were rather stable during the years of study. On the contrary, number of interval sterilizations decreased during the past 3 years due to changes in policy of the Department of Obstetric -Gynecology.

In conclusion, different characteristics of women who underwent postpartum and interval sterilization indicate factors involved in decision making. Thus promotion of female sterilization should be done whenever possible to women who have enough children. Policy of female sterilization should also be stable with continuity.

KEY WORDS: FEMALE STERILIZATION / POSTPARTUM STERILIZATION / INTERVAL STERILIZATION

37 P. ISBN 974-04-6029-1

ปัจจัยที่เกี่ยวข้องระหว่างการทำหมันหลังคลอดและการทำหมันแห้ง ในโรงพยาบาลรามาธิบดี
(FACTORS ASSOCIATED WITH POSTPARTUM AND INTERVAL FEMALE STERILIZATION AT RAMATHIBODI HOSPITAL)

มนสุภา โกมลจันทร์ 4337626 RAHP/ M

วท.ม. (การเจริญพันธุ์และวางแผนประชากร)

คณะกรรมการควบคุมวิทยานิพนธ์ : สัญญา ภัทราชัย, พ.บ., M.P.H.สมศักดิ์ สุทัศน์วรวุฒิ, พ.บ.,Dip in Clin.Epidermiology, วชิระ สิงหะคเชนทร์, สคม. (ประชากรศาสตร์)

บทคัดย่อ

การวิจัยครั้งนี้เป็นการวิจัยแบบสังเกตเชิงวิเคราะห์ โดยมีวัตถุประสงค์ เพื่อศึกษาลักษณะทั่วไปของสตรีที่ทำหมันหลังคลอด สตรีทำหมันแห้ง และแนวโน้มของการทำหมันหญิงโดยศึกษาจากแบบบันทึกข้อมูลของผู้มารับบริการทำหมันหลังคลอด และทำหมันแห้ง จำนวนกลุ่มตัวอย่างทั้งสิ้น 734 ราย โดยเป็นสตรีที่ทำหมันหลังคลอดจำนวน 635 รายและสตรีที่ทำหมันแห้งจำนวน 99 ราย การวิเคราะห์ข้อมูลโดยใช้ค่า สถิติ ร้อยละ ค่าเฉลี่ย ส่วนเบี่ยงเบนมาตรฐาน การทดสอบค่า t เพื่อทดสอบสมมุติฐานและนัยสำคัญทางสถิติ

ผลการวิจัยสรุปได้ดังนี้ ลักษณะของสตรีที่ทำหมันหลังคลอด และทำหมันแห้งมีความแตกต่างกันอย่างมีนัยสำคัญทางสถิติ (ค่า $p < 0.05$) ได้แก่ อายุของสตรี จำนวนการ คลอด จำนวนบุตรมีชีวิต จำนวนบุตรสาว และประวัติโรคประจำตัว โดยสตรีที่ทำหมันหลังคลอดมีอายุ และประวัติโรคประจำตัวน้อยกว่าสตรีที่ทำหมันแห้ง แต่มีประวัติการคลอด จำนวนบุตรมีชีวิต จำนวนบุตรสาว มากกว่าสตรีที่ทำหมันแห้ง อย่างมีนัยสำคัญทางสถิติ ระยะเวลาการทำหมันหลังคลอดสั้นกว่าการทำหมันแห้งอย่างมีนัยสำคัญทางสถิติ

ส่วนแนวโน้มการทำหมันหลังคลอดค่อนข้างคงที่ตลอดระยะเวลาที่ศึกษา แต่การทำหมันแห้งลดลงอย่างชัดเจน ในระยะ 3 ปีหลังซึ่งเป็นผลจากนโยบายการให้บริการที่เปลี่ยนไปของภาควิชาสูติศาสตร์นรีเวชวิทยา คณะแพทยศาสตร์ โรงพยาบาลรามาธิบดี

โดยสรุปจากลักษณะที่แตกต่างกันอาจแสดงถึงปัจจัยการตัดสินใจในการทำหมันที่แตกต่างกัน เนื่องจากแนวโน้มการทำหมันแห้งลดลงจึงควรมีนโยบายส่งเสริมการทำหมันหลังคลอดในสตรีที่มีบุตรพอแล้วทุกคน และควรมีนโยบายการให้บริการที่ต่อเนื่อง

37 หน้า. ISBN 974-04-6029-1

CONTENTS

CONTENTS (cont.)

LIST OF TABLES

LIST OF FIGURES

CHAPTER I
INTRODUCTION

The significance of problems

When no contraception is used by presumably fertile sex partners, about 90% of the women will conceive within 1 years. Women who do not want to become pregnant are best advised to use contraception whenever they become sexually active, no matter how young. At least some girls, perhaps the majority, ovulate before their first menstrual period. For older women aged 40-50, ovulation was shown in one study to be more closely related to regularity of menstruation than to age. When menstruation remained regular, there was evidence of ovulation in almost every cycle. A recent history of oligomenorrhea or of increasing length of the cycle was associated with diminished frequency but not complete absence of ovulation. Even the presence of hot flashes, amenorrhea, and elevated plasma or urine FSH does not guarantee against subsequent ovulation.

The commonly employed contraceptive techniques is current methods of contraception include (1) oral steroidal contraceptives, (2) injected or implanted steroidal contraceptives, (3) intrauterine devices, (4) physical and chemical barrier techniques, (5) withdrawal, (6) sexual abstinence during ovulation, (7) breast feeding, and (8) permanent surgical sterilization.[(1)]

There is need for a simpler, less expensive, reliable, and permanent method of tubal sterilization. In 1994 – 1996, more than 2 million tubal sterilization were performed in the United States[(2)]. Tubal Sterilization is a permanent method of birth control in which a portion of the fallopian tube is cut, tied, clipped, cauterized, or removed[(3)].

The current trend toward delayed childbearing may also affect the number of women at risk for unintended pregnancy. Fertility rates are increasing among women in older age groups. Consequently, fewer women in this age group are exposed to risk because they are either pregnant, trying to become

pregnant, or are postpartum. The incidence of breast – feeding, with its negative effect on fecundity, also appears to be increasing in all age groups. As a consequence of delayed childbearing, the very large group of women over age 30 may be delaying sterilization. Sterilization traditionally has been regarded as the preferred contraceptive option for women who face 20 or more years of exposure to the risk of unwanted fertility after their last wanted birth. Both delayed child baring and delayed sterilization may be expected to affect the mix of contraceptive choices among older women, enlarging the scope for reversible methods. Fewer women in older age groups may elect sterilization and more may choose OC use[4].

Usually women will consider the postpartum or interval female sterilization when they have enough children. From many researches, there were many factors related to the decision of women for the sterilization. In Ramathiboidi Hospital number of female interval sterilization dropped significantly during the past for years. The researcher is interested in studying the trend of sterilization in Ramathiboidi hospital and the associated factors with postpartum and interval female sterilization.

Objective of the study

1. To compare characteristics of women who underwent postpartum and interval sterilization which included age , number of parity , number of abortion , number of living children , number of son , number of daughter , and history of medical disease.
2. To compare duration of operation between postpartum and interval sterilization.
3. To study changes in the number of postpartum and interval female sterilization in Ramathiboidi hospital.

Hypothesis of the research

1. The characteristics of women who underwent postpartum and interval sterilization which included age of women , number of parity , number of

abortion , number of living children , number of son , number of daughter , history of medical disease are different.

2. Duration of operation of postpartum and interval sterilization are different.

Scope and limitation of the research

Data was collected from the records of the patients who received the postpartum and interval female sterilization. This retrospective study has limitation on quality of data from records and the completeness of all associated factors.

Definition in this research

Sterilization	means a permanent method of birth control in which a portion of the fallopian tube is cut, tied, clipped, cauterized,or removed[3].
Postpartum Sterilization	means women who had tubal sterilization during postpartum period in order to make the sterilization after deliver within 72 hours
Interval Sterilization	means women who had tubal sterilization where they were not pregnant nor after delivery.
Number of living children	mean number of living children including this index child.
Number of son	mean number of living son including this index son.
Number of daughter	mean number of delivery living daughter including this index children.
Number of parity	mean number of delivery of pregnancy of term and preterm.
Number of abortion	mean number of abortion prior to this index pregnancy.

History of medical disease	mean women of sample group that have or do not have personal medical or surgical disease.
Duration of operation	mean time since start the sterilization which were or interval sterilization.

Expected outcome

1. Result of research will be apply to improve the family planning services, especially the service of female sterilization.
2. This study will be basis for further in depth study on female sterilization.

Conceptual Framework

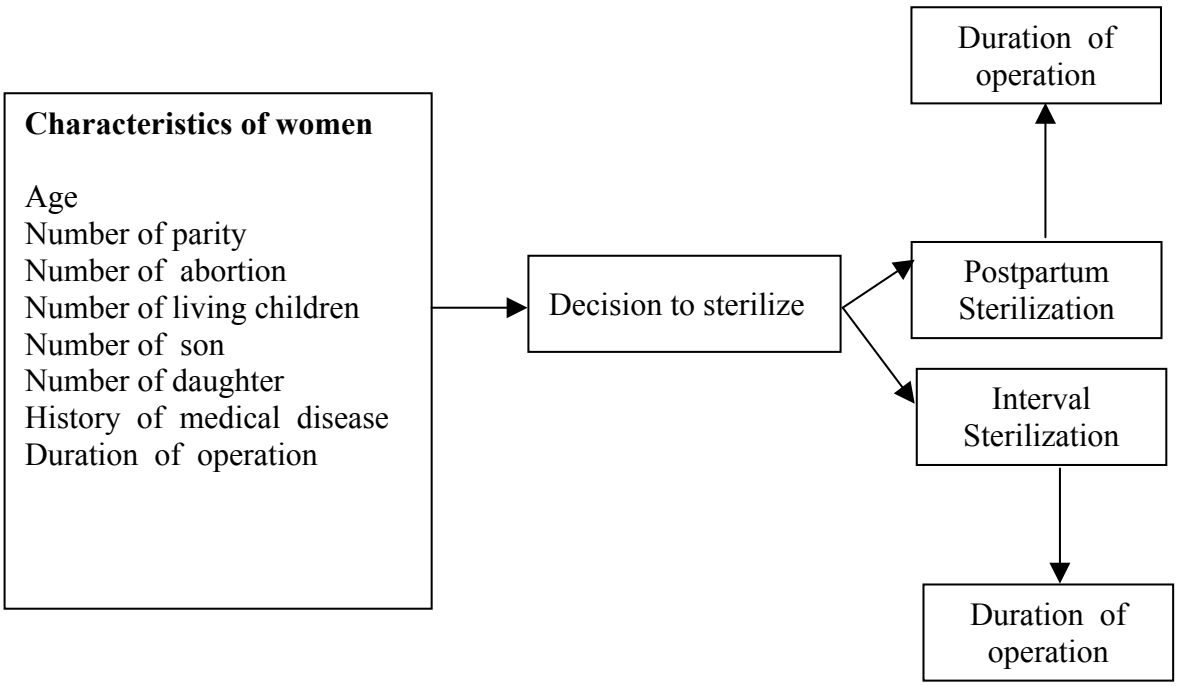


Figure 1 Conceptual framework

CHAPTER II
LITERATURE REVIEW

Sterilization[5]

Sterilization is the methods of fertility control most used by couples in the United States. The great popularity of surgical sterilization has to do with the strong desire of individuals to control their own fertility, their appropriate concern about the safety and effectiveness of present contraceptive methods, and most importantly, the availability of safe and reasonably easy surgical techniques. At age 30, the typical age at sterilization, many married couples have had all the children they want and face 15 or more years of continued need for contraception. Given the concerns prevalent about risk of OCs in older women and fears of IUCD complications, it is not surprising that so many couples have elected a permanent solution (Mosher,1988). For some, the decision to seek sterilization proves to be premature. An age younger than 30 at the time of sterilization or divorce with remarriage has been a strong predictor of regret that may lead to a request for sterilization reversal (Marcil-Gratton, 1988). The availability of low-dose OCs, new IUCDs, and the Silastic implants should provide many couples with new options to premature sterilization. However, in selecting among alternative techniques for sterilization, the physician must consider the likelihood that a patient may eventually seek reversal.

Female Sterilization

Hysterectomy no longer is considered primarily for sterilization because the risk of morbidity and mortality from hysterectomy considerably exceeds that from tubal sterilization. Four procedures are common today:

1. Tubal sterilization at the time of laparotomy for a cesarean section or other abdominal operation.
2. Postpartum minilaparotomy soon after vaginal delivery.

3. Minilaparotomy.
4. Laparoscopy at time remote from pregnancy.

With the development of laparoscopy, vaginal tubal sterilization, which was associated with occasional pelvic abscess, has virtually disappeared in the United States.

Tubal Sterilization.

At the time of cesarean section, tubal sterilization adds no risk other than a slight prolongation of operating time; however, a cesarean procedure involves more risk than does vaginal birth, and planned sterilization should not influence the decision to perform a cesarean. If there is any concern as to the welfare of the infant, sterilization should not be done. Formerly, it was taught that sterilization failure was more common if preformed with a cesarean section, but this has been clearly disproven (Shepard, 1974).

The tubal operation usually elected is the Pomeroy or modified Pomeroy technique. In the classic Pomeroy procedure, a loop of tube is excised after ligating the base of the loop with single absorbable suture. A modification, probably most often used, is excision of the midportion of the tube after ligation of the segment with two separate absorbable sutures. This modified procedure has several names: “partial salpingectomy, ” “Parkland Hospital technique,” “separate sutures technique” and “modified Pomeroy.”

An alternative, now abandoned because of a high rate of pregnancy, is described to prevent its reintroduction. In the Madlener technique, a loop of tube is crushed by cross-clamping its base, ligated with permanent suture, and then excised. Pomeroy and partial salpingectomy procedure are associated with failure rates of 1 to 4 per 1000 cases (Shepard,1974).

In contrast, pregnancy is almost unheard of after tubal sterilization by the Irving (1924) or Uchida (1975) method. In the Irving method, the midportion of the tube is excised after ligating each end of the segment with absorbable suture, as for a modified Pomeroy. The proximal stump of each tube is turned back and led into a

small stab wound in the wall of the uterus and sutured in place, creating a blind loop. With the Uchida method, a saline-epinephrine solution (1:1000) is injected beneath the mucosa of the midportion of the tube, separating the mucosa off of the underlying tube. The mucosa is incised along the antimesenteric border of the tube, and a tubal segment is excised under traction so that the ligated proximal stump will retract beneath the mucosa when released. The mucosa is then closed with sutures, burying the proximal stump separating it from the distal stump. Uchida reported use of his technique in a personal series of more than 20,000 cases with no pregnancies.

Postpartum Minilaparotomy

In the immediate postpartum state, the uterus is enlarged and the fallopian tubes lie in the mid abdomen, easily accessible through a small, 3- to 4-cm subumbilical incision. Postpartum minilaparotomy was the most common method of sterilization in the period immediately before introduction of laparoscopy (Shepard,1974) and remains a commonly used method. Any of the tubal sterilization methods described above is utilized. Ideally, postpartum sterilization is accomplished with the same anesthetic as used for delivery, usually a spinal or epidural block.

Minilaparotomy

Interval minilaparotomy was probably first described by Uchida, but was rediscovered and popularized in the early 1970s with the need for large numbers of sterilizations and as an alternative to the more complex and demanding laparoscopy techniques. In the nongravid state, uterus and tubes lie deep in the pelvis. The development that facilitated interval sterilization was a simple device, the uterine elevator (Osathanondh,1974). This allows use of a short transverse suprapubic incision. The uterus and tubes are elevated upward just beneath the incision by means of the uterine elevator probe, which is placed into the uterine cavity through the vagina. With the tubes accessible through the small incision, a Pomeroy type tubal ligation is usually performed, although any of the laparoscopy tubal lesion techniques described below can be substituted. Minilaparotomy is frequently done as an

outpatient procedure or with just overnight hospitalization and is readily accomplished with local anesthesia.

Laparoscopy

The development of fiberoptics made possible the easy illumination of the abdominal cavity. Laparoscopy was perfected in Germany during the 1960s and began to be widely available in the United States in the early 1970s. With standard laparoscopy technique, the abdomen is inflated with a gas (carbon dioxide or nitrous oxide) via a special needle inserted at the lower margin of the umbilicus. A hollow sheath containing a pointed trocar is pushed through the abdominal wall at the same location, the trocar is removed. And the laparoscope is inserted into abdominal cavity through the sheath to visualize the pelvic organs. A seconds, smaller trocar is inserted in the suprapubic region to allow insertion of special grasping forceps.

Alternatively, an operating laparoscope with a channel for the insertion of instruments can accomplish sterilization without the need for a second puncture of the abdominal wall (Hulka , 1985; Khandwala, 1988).

Laparoscopy sterilization is usually performed in the hospital with general anesthesia, but it can be done using local anesthesia with intravenous sedation. In current practice, overnight hospitalization for laparoscopy is rarely needed.

Open Laparoscopy. Standard laparoscopy carries with it a small but definite risk of injury to major blood vessels with insertion of the sharp trocar. With an alternative technique called “open laparoscopy,” developed by Hasson, neither a needle nor a sharp trocar is used; rather, the peritoneal cavity is opened directly through an incision at the lower edge of the umbilicus. A special funnel-shaped sleeve, the Hasson cannula, is then inserted, and the laparoscope is introduced through it (Hasson, 1982).

Tubal Lesions. In present practice, any of three techniques are used for tubal sterilization via the laparoscope (Fig. 7-12): (1) bipolar electrical coagulation, (2) application of a small Silastic rubber band (Falope ring) around a loop of tube (Yoon et al, 1977), or (3) application of a plastic and metal clip (Hulka clip) across each tube (Hulka et al, 1973).

Associated Research

Age of women

Age of women is related to the fertile conditions of women. Sterilization is the termination of the fertilization. Age is another variance of population, which effect the selection of birth controlling methods. Young women usually take the temporary birth controlling more than permanent controlling (Sterilization). When women getting older, they will sterilize more, due to those women have children, as they required already. So they consider the sterilization in order to not response for the temporary birth controlling. Considering appropriately, the women 30 years old up and already had 2 children should select the permanent birth controlling methods.

Anongnit trongwattana[6] study some characteristics of the women who underwent sterilization. That women who had 2 children in Sakolnakorn province in 1997 , totally 483 samples. They found that there are165 in the women who underwent sterilization. That women who had 2 children and 318 in the women who underwent sterilization That women who had 3 children up. Younger age group lower than 24 years old; will sterilization that women who had 2 children 72.7 percent. Another group of 35 years old up will sterilization that women who had 3 children 92.8 percent. It can find out that age is related to the sterilization that women who had 2 children or 3 children up.

Tuangthip Chandara[7] study trends and factors that effect the sterilization, Retrospective study on the survey data, limited project and effect of contraception in Thailand 1997, totally 6,855 samples. Finding out that most women sterilize during 35-39 years old 27.2 percent, and will sterilization decreasingly during 45-49 years old only 8.6 percent.

Suwattana Viboonsate and Pichit Pithakthepsombat[8] studied factors that effect the selection of birth controlling methods of the spouses in rural area of the North in 1999. They found that age of women had positive association with sterilization. Twenty one percent of women less than 30 years old, used sterilization only as contraception method compared to 45.8 percent of women 30-39 years old.

Number of parity and abortion

Number of parity is another interesting factor. If the previous pregnancy has problem such as abortion or children death within first year, the women may not decide to receive the postpartum sterilization service. For the present pregnancy, if a woman has a lot of problem during the pregnancy caring period, women may not sure about the living of their children and will not decide to take the postpartum sterilization immediately.

Pichit Pitakthepsombat[9] study factors that effect the married women who have idea to sterilize in the future, at Chonburi province and found that group of women who children death 1 children up have idea to sterilization in the future for 52.6 percent. And women who never have death children have idea to sterilize in the future for 60.7 percent.

It can find out that women who have death children, decided to sterilize less than women who never have death children.

At the present, the researcher does not find any researches on this issue. So there is no research data to support the above idea. The researcher will continue studying this factor.

Number of living children

Another variance that helps spouses to consider the sterilization is number of living children. Women that have enough living children as their requirement will consider sterilizing much more. Women should consider the permanent birth controlling methods when having 2 children up.

Rerdee Emyam[10] study social economic and population factors that effect the decision for postpartum sterilization. 1996 study number of living children that association with sterilization and found that group of sterilization 57.5 percent has 3 living child up and 42.5 percent has 2 living child. For group of non-sterilization 81.5 percent has 2 living child and 18.5 percent has 3 living child up. Number of living child is related to the decision for sterilization. Women decided to sterilization when they have more than 2 living child.

Wilailak Pariyachatkul[11] study factors associated permanent and temporary birth controlling methods from group of women who have 2 living child up. Year 2002, study and found that women who had 2 living children used for 26.8 percent which 49.2 percent of women who had 3 living children use the same method. So number of living children is related to the decision to sterilization. There was statistically significant association.

Thuangthip Chandra[7] study and found that who has 3-5 children will sterilization mostly 57.7 percent and who had 1-2 living children sterilize 35.9 percent. Number of living children is related to the sterilization as statistic meaning. From the study, can find out that number of living child is relate to the decision to sterilization. Women who have more living child are trend take the postpartum sterilization.

Number of son and daughter

Most spouses already expected sexual of their children. It is the important cause that spouses decide to continue having children until they get the required sexual of their children. Son is mostly required as per the tradition and value.

Punnipa Paiboonsombat[12] study the relation between sexual of children to the sterilization in city and rural area and study only the family with 2 children in 1995. It can find from the study that in city, sexual of children do not relate the sterilization and in rural area, sexual of children is relate to the sterilization, as statistic meaning. That is family with 2 son will consider to sterilize more than family with 2 daughters.

From the study, sexual of children is important factor to the decision to sterilization. It can be that son is very important to the decision.

CHAPTER III
MATERIALS AND METHODS

Research design

This research was an analytical research which studied trends of female sterilization and the differences between characteristics of women underwent postpartum and interval female sterilization. Data was collected from the records of female sterilization in Ramathiboidi Hospital.

Study location

Department of Obstetrics-Gynecology, Ramathiboidi Hospital

Population and Sample

This research included women who underwent sterilization at Ramathiboidi hospital. The samples were these population who come during 1st January 1999 – 31st December 2003. There were totally 734 women , 635 postpartum sterilized women and 99 interval sterilized women.

Variables and Measurements

Variables

1. Independent variables were :
   - Age of women
   - Number of parity
   - Number of abortion
   - Number of living children
   - Number of son
   - Number of daughter

- History of Medical disease
- Duration of operation

2. Dependent variables were:

   Type of sterilization which were divided into 2 groups

   1. Postpartum sterilization
   2. Interval sterilization

Measurements

The research applies data collected from the records of women who underwent sterilization at the Department of Obstetrics-Gynecology, Ramathiboidi Hospital. The samples were women who come during 1st January 1999– 31st December 2003.

Data was consisted of 2 parts of data as follow

Part 1: General data

- Age of women
- Number of parity
- Number of abortion
- Number of living children
- Number of son
- Number of daughter
- History of Medical disease
- Duration of operation
- Type of sterilization

Part 2 : Number of female sterilization (postpartum and interval female sterilization) in Ramathiboidi Hospital. The samples were these population who come during 1st January 1999 – 31st December 2003.

Data Collection procedure

1. Researcher asking for assistance from the department of Obstetrics-Gynecology, to collect data from the records of women that receive the sterilization service of the department of Obstetrics- Gynecology, Ramathiboidi Hospital
2. Collecting data from the record of women that receive the sterilization service of the department of Obstetrics-Gynecology, Ramathiboidi.
3. Verifying the completion of data from records of women that receive the sterilization service of the department of Obstetrics- Gynecology, Ramathiboidi Hospital and analysis data.

Data Analysis

1. Data Preparation

   Collecting and verifying data then record into diskette. Analyse data with computer by using SPSS/PC+(Statistical Package for the Sciences/Personal Computer Plus)

2. Statistics

   The statistics used for data analysis were as follow:

   2.1 Descriptive statistics

   Frequency, percentage, average and standard deviation were calculated to characteristic of women

   2.2 Analytical statistics

   Data was analysed by using t - test.

CHAPTER IV
RESULTS

The purpose of this research was to study the factors associated with postpartum and interval female sterilization in Ramrthiboidi hospital. The data was collected from 734 cases (postpartum female sterilization group = 635 cases and interval female sterilization group = 99 cases). The result of the study is as follow.

Objective I :

Characteristics of the woman who underwent sterilization

1.1 Age

The age of woman ranged from 12 - 47 years. Majority of women in both group were in the age group of 31 - 35 years (43.8 % in postpartum sterilization group, 35.4% in interval sterilization group and 34.9% in overall). The mean age of both groups was 32.29 ± 5.16 years old with 31.96 ± 4.88 years old in postpartum sterilization group and 34.38 ± 6.31 years old in interval sterilization group. (Table 1)

1.2 Number of parity

The number of parity ranged from 0 – 6. Majority of them were had two parities (59.1 % in postpartum sterilization group, 55.6% in interval sterilization group and 58.6% in overall). The mean parity was 2.38 ± 0.74 with 2.46 ± 0.67 in postpartum sterilization group and 1.89 ± 0.92 in interval sterilization group. (Table 1)

1.3 Number of abortion

Majority of the women had no history of abortion (75.4 % in postpartum sterilization group, 74.7% in interval sterilization group and 75.3% in overall). The

mean number of abortion was 0.32 ± 0.64 with 0.31 ± 0.60 in postpartum sterilization group and 0.41 ± 0.82 in interval sterilization group. (Table 1)

1.4 Number of living children

Majority of the women had two children (60.2 % in postpartum sterilization group, 55.6% in interval sterilization group and 59.5 % in overall). The mean of number of living children was 2.35 ± 0.71 with 2.42 ± 0.64 in postpartum sterilization group and 1.89 ± 0.92 in interval sterilization group. (Table 1)

1.5 Number of son

Majority of the women had only one son (41.4 % in postpartum sterilization group, 44.4 % in interval sterilization group and 41.8 % in overall). The mean number of son was 1.05 ± 0.85 with 1.07 ± 0.86 in postpartum sterilization group and 0.95 ± 0.83 in interval sterilization group. (Table 1)

1.6 Number of daughter

Majority of the women had only one daughter (42.0 % in postpartum sterilization group, 54.5 % in interval sterilization group and 43.7 % in overall). The mean number of daughter was 1.29 ± 0.90 with 1.35 ± 0.91 in postpartum sterilization group and 0.94 ± 0.75 in interval sterilization group. (Table 1)

1.7 History of medical diseases

Most of these woman have no medical disease (90.5 % in postpartum sterilization group, 64.6 % in interval sterilization group and 87.0 % in overall). (Table 1)

The detail of medical disease was listed in Table 2. Thyroid disease, asthma, Diabetes mellitus, thalassemia and HIV infection were more common in postpartum sterilization group. Mental retardation, hypertension, allergic rhintis as well as thyroid disease and asthma were common in interval sterilization group. (Table 2)

Table 1 Characteristics of women who underwent sterilization

Characteristics	**Female Sterilization**		
	Postpartum	**Interval**	**Total**
	Number (%)	**Number (%)**	**Number (%)**
Age (years)			
≤ 20	17 (2.7)	5 (5.1)	22 (3.0)
21 –25	61 (9.6)	5 (5.1)	66 (9.0)
26 – 30	178 (28.0)	7 (7.1)	185 (25.2)
31 – 35	221 (43.8)	35 (35.4)	256 (34.9)
36 – 40	144 (22.7)	34 (34.3)	178 (24.3)
41 – 45	13 (2.0)	12 (12.1)	25 (3.4)
≥ 46	1 (0.2)	1 (1.0)	2 (0.3)
Total	635 (100)	99 (100)	734 (100)
X ± S.D.	**31.96 ± 4.88**	**34.38 ± 6.31**	**32.29 ± 5.16**
Range	**19 – 47**	**12 – 47**	**12 – 47**
Number of Parity			
0	-	9 (9.1)	9 (1.2)
1	9 (1.4)	16 (16.2)	25 (3.4)
2	375 (59.1)	55 (55.6)	430 (58.6)
> 3	251 (39.5)	19 (19.2)	270 (36.8)
Total	635 (100)	99 (100)	734 (100)
X ± S.D.	2.46 ± 0.67	1.89 ± 0.92	2.38 ± 0.74
Range	1 – 6	0 – 5	0- 6
Number of Abortion			
0	479 (75.4)	74 (74.7)	553 (75.3)
1	123 (19.4)	13 (13.1)	136 (18.5)
2	27 (4.3)	9 (9.1)	36 (4.9)
> 3	6 (0.9)	3 (3.0)	9 (1.2)
Total	635 (100)	99 (100)	734 (100)
X ± S.D.	0.31 ± 0.60	0.41 ± 0.82	0.32 ± 0.64
Range	0 – 4	0 – 4	0 - 4

Table 1 Characteristics of women who underwent sterilization (cont.)

Characteristics	Female Sterilization		
	Postpartum	**Interval**	**Total**
	Number (%)	**Number (%)**	**Number (%)**
Number of living children			
0	-	9 (9.1)	9 (1.2)
1	12 (1.9)	16 (16.2)	28 (3.8)
2	382 (60.2)	55 (55.6)	437 (59.5)
> 3	241 (38.0)	19 (19.2)	260 (35.4)
Total	635 (100)	99 (100)	734 (100)
X ± S.D.	2.42 ± 0.64	1.89 ± 0.92	2.35 ± 0.71
Range	1 – 5	0 - 5	0 - 5
Number of son			
0	179 (28.2)	32 (32.3)	211 (28.7)
1	263 (41.4)	44 (44.4)	307 (41.8)
2	165 (26.0)	19 (19.2)	184 (25.1)
> 3	28 (4.4)	4 (4.0)	32 (4.4)
Total	635 (100)	99 (100)	734 (100)
X ± S.D.	1.07 ± 0.86	0.95 ± 0.83	1.05 ± 0.85
Range	0 – 4	0 – 3	0 – 4
Number of daughter			
0	**109 (17.2)**	**27 (27.3)**	**136 (18.5)**
1	267 (42.0)	54 (54.5)	321 (43.7)
2	199 (31.3)	16 (16.2)	215 (29.3)
> 3	60 (9.4)	2 (2.0)	62 (8.4)
Total	635 (100)	99 (100)	734 (100)
X ± S.D.	1.35 ± 0.91	0.94 ± 0.75	1.29 ± 0.90
Range	0 – 5	0 – 4	0 - 5

Table 1 Characteristics of women who underwent sterilization (cont.)

Characteristics	Female Sterilization		
	Postpartum Number (%)	Interval Number (%)	Total Number (%)
Medical disease			
No	575 (90.5)	64 (64.6)	639 (87.0)
Yes	60 (9.5)	35 (35.4)	95 (13.0)
Total	635 (100)	99 (100)	734 (100)

Table 2 Medical disease in women who underwent female sterilization

Medical disease	Female Sterilization		
	Postpartum Number (%)	Interval Number (%)	Total Number (%)
Thyroid disease	10 (1.37)	5 (0.68)	15 (2.05)
Asthma	8 (1.09)	4 (0.55)	12 (1.64)
Mental retardation	-	10 (1.37)	10 (1.37)
Hypertension	4 (0.55)	6 (0.82)	10 (1.37)
Diabetes mellitus	8 (1.09)	1 (0.14)	9 (1.23)
Thalassemia	7 (0.96)	1 (0.14)	8 (1.09)
Allergic rhinitis	-	7 (0.96)	7 (0.96)
HIV	6 (0.82)	-	6 (0.82)
Migraine	1 (0.14)	3 (0.41)	4 (0.55)
Gastroenteric	1 (0.14)	3 (0.41)	4 (0.55)
Heart	3 (0.41)	1 (0.14)	4 (0.55)
TB	2 (0.27)	1 (0.14)	3 (0.41)
Other	8 (1.09)	7 (0.96)	15 (2.05)

Comparison of characteristics

The results of the study showed that the characteristic of women, who underwent postpartum and interval sterilization were different. There were statistically significant association ($p < 0.05$) with age of women, number of parity, number of living children , number of daughter and history of medical disease.

But there was no statistically significant association between number of abortion and number of son with type of female sterilization. (Table 3)

Table 3 Comparison between type of female sterilization and characteristics of woman

Characteristics	Female Sterilization		
	T – test	**df**	**p-value**
Age (years)	-4.826	732	< 0.001
Number of Parity	8.672	732	< 0.001
Number of Abortion	-1.438	732	0.151
Number of living children	8.292	732	< 0.001
Number of son	1.281	732	0.201
Number of daughter	4.370	732	< 0.001
Medical disease	7.384	732	< 0.001

Objective II :

Duration of operation

The range of duration of female sterilization were 5 – 70 minutes. Majority of them were between 11 – 30 minutes in both groups. The overall mean duration of operation was 23.99 ± 10.81 minutes with 23.12 ± 10.19 minutes in postpartum sterilization group and 29.41 ± 12.88 minutes in interval sterilization group. The difference was statistically significant ($p < 0.001$) (Table 4)

Table 4 Duration of operation of female sterilization

Duration of operation	**Female Sterilization**		
	Postpartum	**Interval**	**Total**
	Number (%)	**Number (%)**	**Number (%)**
Duration of surgery (minute)			
≤ 10	138 (21.7)	8 (8.1)	146 (19.9)
11 – 20	241 (38.0)	30 (30.3)	270 (36.9)
21 – 30	184 (29.0)	39 (39.4)	223 (30.4)
≥ 30	72 (11.3)	22 (22.2)	94 (12.8)
Total	635 (100)	99 (100)	734 (100)
X ± S.D.	23.12 ± 10.19	29.41 ± 12.88	23.99 ± 10.81
Range	5 – 60	10 – 70	5 – 70
T- test = -4.568	**df** = 732	**p-value** < 0.001	

Objective III :

Trend of female sterilization in Ramathiboidi hospital during the year 1999 – 2003

There were about 700 cases of female sterilization per year in Ramathiboidi hospital during the year 1999 – 2000. In the years 2001 – 2003 the number of sterilization decreased to 400 or more cases per year. This is due to the decreasing number of interval sterilization during those year. In 1999 – 2000 the number of interval sterilization was around 200 cases and decreased to less than 100 cases per year in 2001 – 2003. The number of postpartum sterilization was later stable of 400 cases per year during the 5 year of study. (Figure 2)

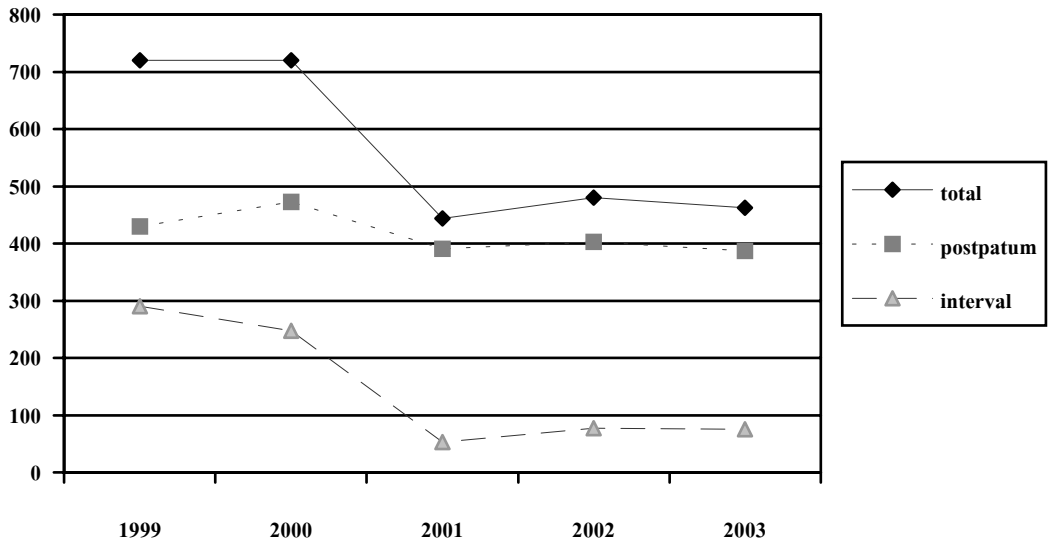


Figure 2 Number of sterilization in Ramathiboidi hospital, year 1999 – 2003

Figure 3 – 7 showed monthly variation in number of sterilization in the year 1999 – 2003. There was no definite pattern of number of sterilization in each month but the number of total sterilization seemed to be higher during the midyear period (January – August). The number of interval sterilization was significantly less in the year 2001 – 2003. The number interval sterilization in each month during these years were less than 10 cases per month. (Figure 3 – 7)

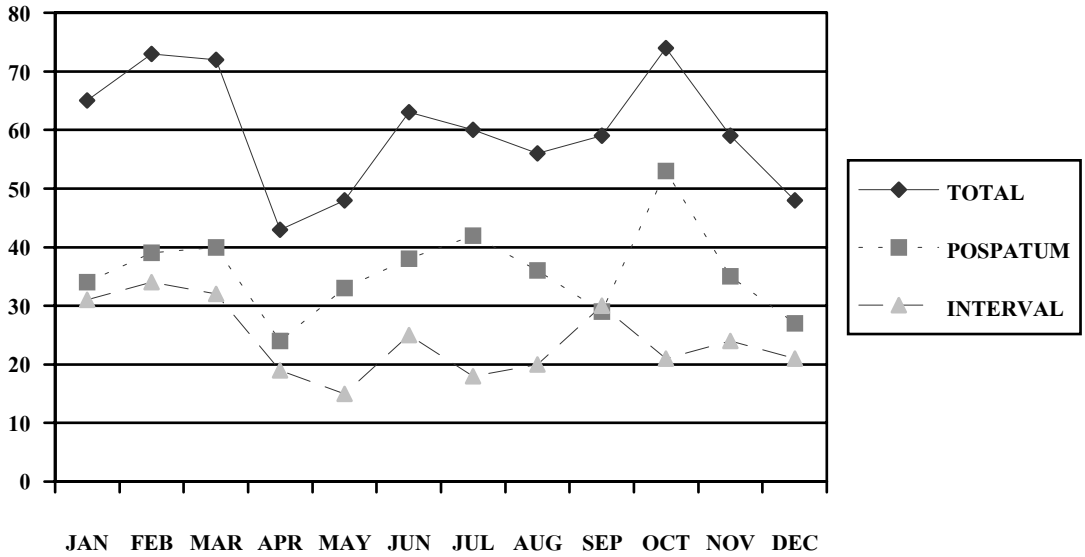


Figure 3 Number of sterilization in Ramathiboidi hospital, year 1999.

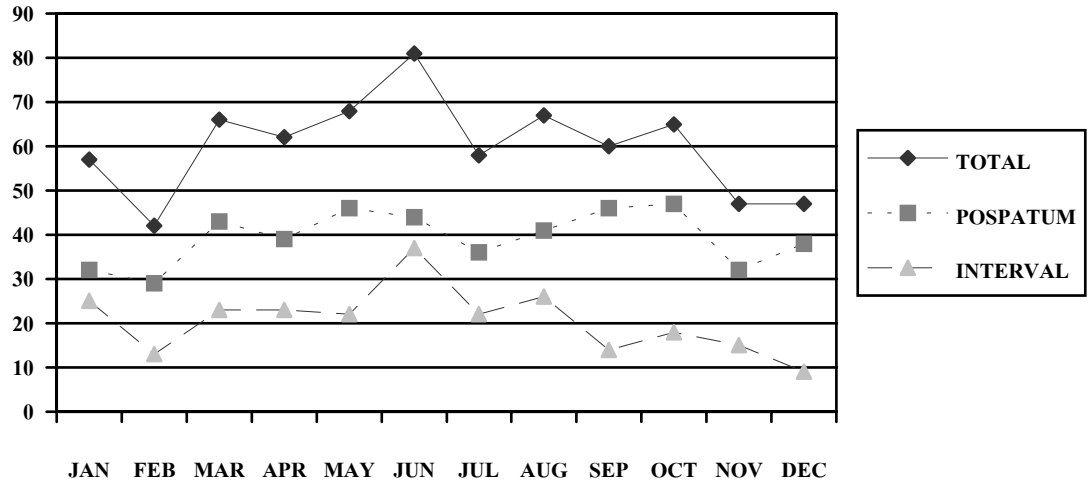


Figure 4 Number of sterilization in Ramathiboidi hospital, year 2000.

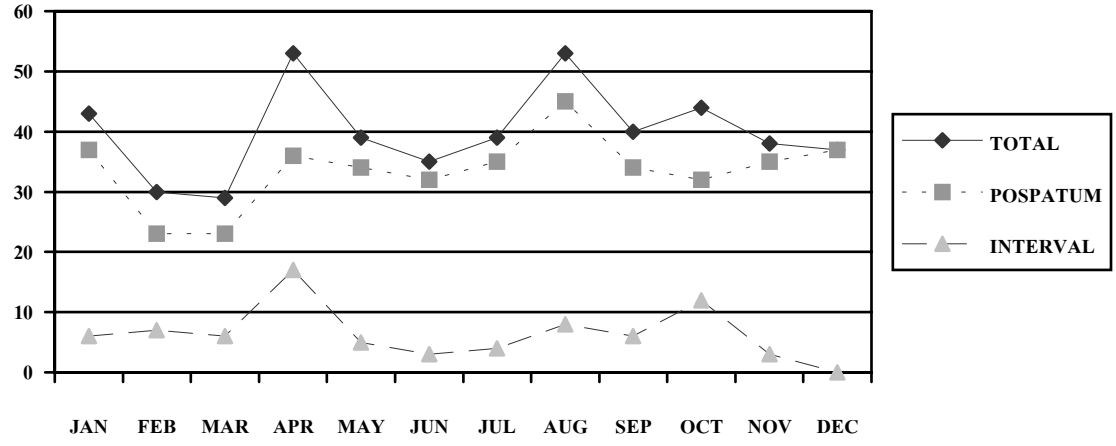


Figure 5 Number of sterilization in Ramathiboidi hospital, year 2001

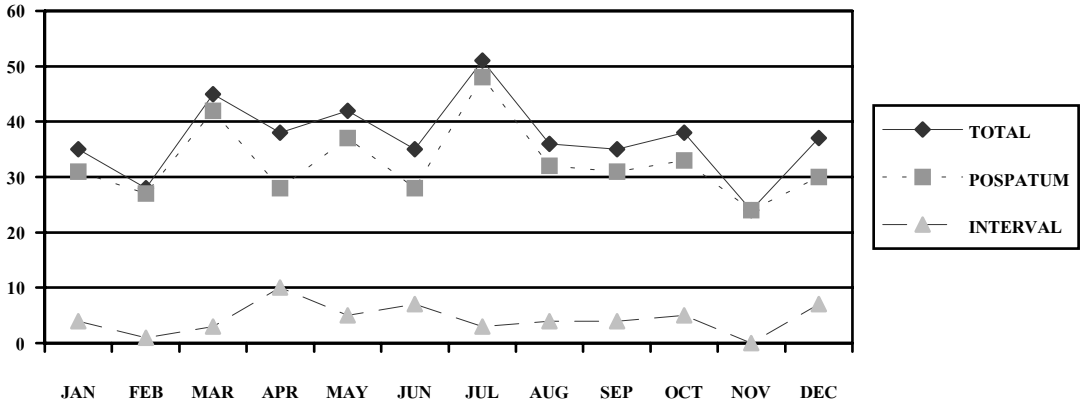


Figure 6 Number of sterilization in Ramathiboidi hospital, year 2002.

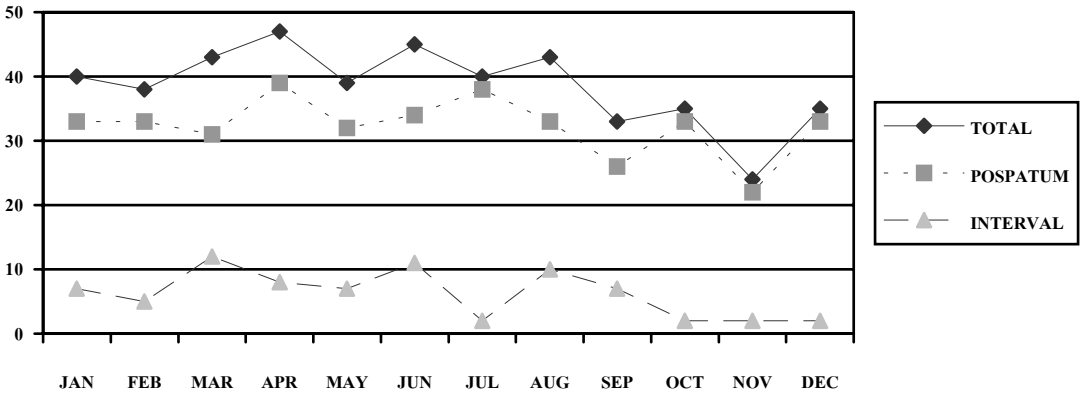


Figure 7 Number of sterilization in Ramathiboidi hospital, year 2003.

CHAPTER V
DISCUSSION

The discussion of this retrospective study will be divided into 2 parts.

Part I : Research Methodology

Part II : Results of the study

Part I :

1. Research Methodology

1.1 Research design

This research was an analytical observational research which studiedtrends of female sterilization and the differences between characteristics of women underwent postpartum and interval female sterilization at Ramathiboidi Hospital. Data was collected from the records of case of female sterilization in Ramathiboidi Hospital. The research design was appropriate for the objectives and the duration of the study is not long so that the research was finished within 6 months.

1.2 Population and Sample

This research included women who underwent sterilization at Ramathiboidi hospital. The samples were women who underwent sterilization during 1st January 1999 – 31st December 2003. There were totally 734 women , 635 underwent postpartum sterilization and 99 underwent interval steriliation. This study applied a purposive sampling technique which included women who underwent sterilization at a specific time period. This also included study on the trend of female sterilization at Ramathiboidi hospital as well as the differences between characteristics of women who underwent postpartum and interval female sterilization.

Part II :

2. Results of the study

2.1 Differences between characteristics of the woman who underwent postpartum and interval female sterilization.

2.1.1 Age

Age of women who underwent postpartum sterilization was significantly younger them women who underwent interval sterilization. Suwattana Viboonsate and Pichit Pithakthepsombat[8] studied factors that affected the selection of birth controlling methods of the spouses in rural area of the Northern part of Thailand in 1999. They found that age of women had positive association with sterilization. Twenty one percent of women less than 30 years old used sterilization as contraceptive method compared to 45.8 percent of women 30-39 years old.

However, the difference between age of women who underwent postpartum and interval sterilization was not ever documented. It seemed that women who underwent postpartum sterilization had more children at the younger age that motivated them for sterilization.

2.1.2 The number of parity and number of living children

Wilailak Pariyachatkul[11] studied factors associated with permanent and temporary birth controlling methods and found that women who had 2 living children used sterilization for 26.8 percent and 49.2% of women who had 3 living children were sterilization. In this study the women who underwent postpartum sterilization were younger and had more children than women who underwent interval sterilization because they had more children at younger age. Women who underwent interval sterilization were more likely have problems regarding pregnancy such as socioeconomic problem or medical diseases. Thus there were more reason for these women to have limited number of children.

2.1.3 Number of abortion

There was no significant different on number of abortion between women who underwent postpartum and interval sterilization.

2.1.4 Sex of children

Punnipa Paiboonsombat[12] study the relation between sex of children and sterilization in the city and rural area. They found that in the city sex of children did not have associative with sterilization but in the rural area sex of children is significantly related to sterilization. In agricultural society number of son is desired in the family to help work in the field. Most of women in this study were women living in Bangkok which is metropoliter are these number of son should have no effection decision of sterilization. The significant different in number of daughter reflected the number of children in family although the women of postpartum sterilization have slightly more son the women of interval sterilization but there was no statistic significant.

2.1.5 History of medical diseases

History of medical diseases: women who underwent interval sterilization had more history of medical diseases then women who underwent postpartum sterilization. These were factors for decision for permanent contraception. These indications included mental retardation and chronic hypertension. The women who underwent interval sterilization were older because they decided for sterilization late in age. Because of advanced age, more medical complication was found.

2.2 Duration of operation

Postpartum sterilization is easiest interval sterilization. In postpartum sterilization the uterus is still large and extends above pelvis up to the umbilical area. It is much more easier to find the fallopian tubes. In Ramathiboidi hospital most postpartum sterilization were also for teaching and

were done by medical students. Anyway the duration of operation of pospartum sterilization was still shorter.

2.3 Trend of female sterilization.

Interval sterilization decided during 2001 – 2003 this is in to the change in the policy. In the past interval female sterilization was done in multiparus women which unintended pregnancy due to failure of contraception. In this cases termination of pregnancy by suction curettage was provide prior to female sterilization in 2001 – 2003 the administer of the department OB – GYN. Question about the legality of these services. Because in Thailand, the abortion law is still miss understood and debatable. The service of termination of pregnancy and together which female sterilization was positiveness in 2001 – 2003.

The result of this study show ed. How a policymaker can affect the choice and services of birth controlling method.

CHAPTER VI
CONCLUSION

The objectives of this analytical research were to study the characteristics of women who underwent postpartum and interval female sterilization and the trend of female sterilization at Ramathiboidi hospital. Data was collected from the records of women who underwent sterilization at Ramathiboidi hospital. There were totally 734 women, 635 were sterilized during postpartum period and 99 was sterilized during interval period. The descriptive statistics were frequency, percentage, mean and standard deviation. t–test were used for hypothesis testing of association.

The results of the study showed that the characteristic of women, who underwent postpartum and interval sterilization were different. There was statistically significant association ($p < 0.05$) with age of women, number of parity, number of abortion , number of living children , number of daughter, and medical disease. Women of postpartum sterilization were less in age , number of abortion, and history of medical disease but more in number of parity , number of living children , number of daughter. Duration of operation was significantly less in cases of postpartum sterilization them in interval sterilization.

Total female sterilization there was about 700 cases per year. Sterilization in this year 2001 – 2003 the number of sterilization decreased to 400 or more cases per year. This is due to the decreasing number of interval sterilization during those year in 1999 – 2000 the number of interval sterilization is around 200 cases and decreased to less than 100 cases per year. In 2001 – 2003 the number of postpartum sterilization was later stable of 400 cases per year during the 5 year of study.

Recommendation for Application

1. Results of this research will be applied to improve the family planning services by encouraging every woman for sterilization, both interval and postpartum.
2. Results of this research will be basis for further in depth study on female sterilization.

Recommendation for Further Research

1. Factors associated with interval female sterilization.
2. Factors associated with female sterilization and the sex of children.

REFERENCES

1. Noman F, editor. Family Planning. Basic Gynecology and Obstetrics. New Jersey: Prenpice-Hall; 1993: 196.
2. Mckay AP, Kieke BA, Koonin LM. Tubal sterilization in the United States, 1994 – 1996. Fam Plann Perspect 2001; 33: 161 – 5.
3. Ryan M, Eun – Jeong K, Tedd A, Gloria A, Kelly H, et al. Tubal sterilization with a waterborne polyethylene glycol in situ cross – linking material: a minimally invassive approach. Fertil and Steril 2005; 83: 1284.
4. James T, Barbara V. Contraceptive use projection : 1999 – 2010. Am J of obstet and gynecol 1992; 167: 1160 – 2.
5. Coteland LJ, editor. Contraception. Text Book of Gynecology. Philadelphia: W.D. Saunders; 1993. p. 157-184.
6. Anongnit Trongwattanawut. Some characteristic of women that sterilize when having 2 children in Sakonnakorn Province. Master degree thesis in sciences, major in fertilization and population planning. Graduated school Mahidol University; 1999. p. 44-49, 52-53.
7. Chantra Tuangtip. Level Trend Determinants and Demographic Consequence of Contraceptive Sterilization in Thailand. Ph.D. Thesis in Development Administration (Population and Development). The National Institute of Development Administration; 1995.
8. Suwattana Wiboonsate, Pichit Pitakthepsombat. Factors that effect the sterilization selection of spouses in the rural area of the North B.E. 2532. Institute document number 173/32 Population Institute Chulalongkorn University. Bangkok; 2000.
9. Pichit Pitakthepsombat. Factors that effect the idea to sterilize in future of married women in Chonburi province. Association of Thailand Sterilization magazine; 1982. p.15-145.

10. Rerdee Emyam. Social economy and population factors that effect the decision for postpartum sterilization: studying only the patients that receive service from a common deliver room Siriraj Hospital. Master degree thesis in Social and population research. Graduated school Mahidol University; 1986. p. 68.
11. Wilailak Pariyachatkul. Factors that effect the permanent and temporary birth controlling methods from group of women that have 2 living child after deliver, at Health Supplementary Centre Zone 6 Nakornsawan Province. Master degree thesis in science, major in fertility and population planning. Graduated school Mahidol University; 2002.
12. Pannipa Paiboonsombat. The relation between sexual of children to the sterilization in city and rural area, studying only family that have 2 children. Master degree thesis in Social science, major in Social and population research. Graduated school Mahidol University, 1997.

APPENDIX

RAMATHIBODI HOSPITAL

Department	Division	Ward
Attending Staff	Resident	

Name.....

H.N. ..... Age.....

Date of Operation.....

OPERATIVE NOTE

SURGEON	ASSISTANTS	SCRUBBED NURSE	CIRC. NURSE	ANESTHESIOLOGIST	ANES. TECHNIQUE

PREOPERATIVE DIAGNOSIS

POSTOPERATIVE DIAGNOSIS

OPERATION **รายงานการทำหมันแห้ง**

SWAB AND INST. OK	

ผลตรวจทางห้องปฏิบัติการ Hb.....gm%, Hct.....%, UA.....

VDRL....., HBsAg ....., Anti HIV.....

Pap smear [ ] normal [ ] abnormal..... [ ] not done

Chest film [ ] normal [ ] abnormal.....

Operative Note

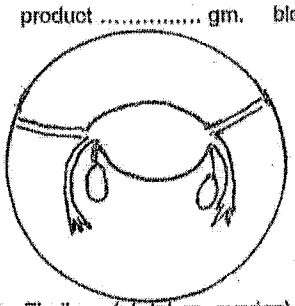
Analgesics & sedation / anesthesia.....

Xylocaine.....cc. [ ] c adrenalin [ ] s adrenalin

Operation [ ] D & C [ ] suction curettage

Uterine size..... wk., sound..... cm., Cx dilate to Hegar No....., evacuation ด้วย suction No.....

product ..... gm. blood loss..... cc.



Laparoscopy

[ ] จี้เฉย ๆ [ ] จี้แล้วตัด

[ ] ทนเดียว [ ] หลายหน

[ ] unipolar [ ] bipolar

.....

Skin suture.....เข็ม

Mini-laparotomy

Skin incision .....

[ ] modified Pomeroy

[ ] others.....

.....

Skin suture.....เข็ม

Findings (ut, tubes, ovaries) [ ] normal [ ] abnormal

.....

Complications .....

เวลาผ่าตัด - suction curettage .....นาที

- ทำหมัน.....นาที

Teaching case [ ] no [ ] yes for Ext. R1, R2, R3

ลงชื่อ (ตัวบรรจง) .....ผู้ทำผ่าตัด (Ext, R1, R2, R3, F., S.)

RAMATHIBODI HOSPITAL

Department	Division	Ward
Attending Staff	Resident	

Name.....

H.N. ..... Age.....

Date of Operation.....

OPERATIVE NOTE

SURGEON	ASSISTANTS	SCRUBBED NURSE	CIRC. NURSE	ANESTHESIOLOGIST	ANES. TECHNIQUE

PREOPERATIVE DIAGNOSIS

POSTOPERATIVE DIAGNOSIS

OPERATION รายงานการทำหมันแห้ง

SWAB AND INST. OK	

ผลตรวจทางห้องปฏิบัติการ Hb.....gm%, Hct.....%, UA.....

VDRL....., HBsAg ....., Anti HIV.....

Pap smear [ ] normal [ ] abnormal..... [ ] not done

Chest film [ ] normal [ ] abnormal.....

Operative Note

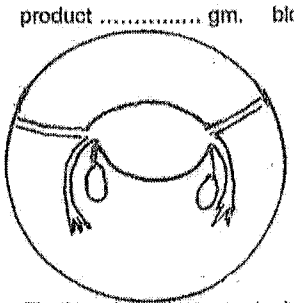
Analgesics & sedation / anesthesia.....

Xylocaine.....cc. [ ] c adrenalin [ ] s adrenalin

Operation [ ] D & C [ ] suction curettage

Uterine size..... wk., sound..... cm., Cx dilate to Hegar No....., evacuation ด้วย suction No.....

product ..... gm. blood loss..... cc.



Laparoscopy

[ ] จี้เฉย ๆ [ ] จี้แล้วตัด

[ ] ทนเดียว [ ] หลายทน

[ ] unipolar [ ] bipolar

.....

Skin suture.....เข็ม

Mini-laparotomy

Skin incision .....

[ ] modified Pomeroy

[ ] others.....

.....

Skin suture.....เข็ม

Findings (ut, tubes, ovaries) [ ] normal [ ] abnormal

.....

Complications .....

เวลาผ่าตัด - suction curettage .....นาที

- ทำหมัน.....นาที

Teaching case [ ] no [ ] yes for Ext. R1, R2, R3

ลงชื่อ (ตัวบรรจง) .....ผู้ทำผ่าตัด (Ext, R1, R2, R3, F., S.)

แผ่นแรกแยกส่งภาควิชาสูติศาสตร์-นรีเวชวิทยา แผ่นที่2 เก็บไว้ในเวชระเบียน

RH 0091

RAMATHIBODI HOSPITAL

Department	Division	Ward
Attending Staff	Resident	

Name.....

H.N. ..... Age.....

Date of Operation.....

OPERATIVE NOTE

SURGEON	ASSISTANTS	SCRUBBED NURSE	CIRC. NURSE	ANESTHESIOLOGIST	ANES. TECHNIQUE

PREOPERATIVE DIAGNOSIS

POSTOPERATIVE DIAGNOSIS

OPERATION รายงานการทำหมันหญิงหลังคลอด

SWAB AND INST. OK	

ประวัติ

Para (รวมการคลอดครั้งนี้ด้วย) ....., ..., ..., ... last para .....วัน last abort..... ปี

(คลอดครบกำหนด, คลอดก่อนกำหนด, แท้ง, บุตรมีชีวิต) จำนวนบุตรชาย [ ] คน

โรคประจำตัว [ ] ไม่มี [ ] มี .....

ประวัติแพ้ยา [ ] ไม่มี [ ] มี คือ .....

ผลการตรวจทางห้องปฏิบัติการ Hct. หลังคลอด .....%

Lab. II หรือครั้งสุดท้าย Hb. .....gm% Hct. .....%

VDRL [ ] NR. [ ] reactive titer ..... treatment.....

HBsAg [ ] neg. [ ] positive titer .....

Anti HIV [ ] neg. [ ] positive .....

Chest film [ ] normal [ ] abnormal .....

Others .....

Operative note

Anesthesia [ ] general .....

[ ] .....

.....

Skin incision [ ] semicircular subumbilical [ ] vertical midline.....

Finding :- Uterus [ ] normal P.P. [ ] abnormal .....

Tubes [ ] normal [ ] abnormal .....

Ovaries [ ] normal [ ] abnormal .....

Skin suture [ ] silk .....เข็ม [ ] subcuticular .....

เวลาฝาตัด .....นาที

Teaching case [ ] no [ ] yes for Ext., R1, R2, R3

หมายเหตุ .....

ลงชื่อ ..... ผู้ทำการฝาตัด (Ext., R1, R2, R3, F, S)

BIOGRAPHY

NAME	Miss Monsupa Komolchan
DATE OF BIRTH	22 February, 1976
PLACE OF BIRTH	Bangkok, Thailand
INSTITUTION ATTENDED	Mahidol University - 1994 - 1998: Bachelor of Nursing Science - 2000 - 2004: Master of science (Human Reproductive and population planning)
POSITION & OFFICE	1998 – Present : Department of Obstetrics and Gynecology at Phyathai hospital. Bangkok, Thailand