

# Factors Affecting Decision of Tubal Ligation After Repeated Caesarean Sections

KIREN KHURSHID MALIK, MARIAM MALIK, NOREEN AKMAL  
*Department of Obstetrics & Gynaecology, Sir Ganga Ram hospital, Lahore*

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## ABSTRACT

**Objective:** To identify the reasons why women do not undergo sterilization after three or more caesarean sections.

**Study design:** Cross-sectional survey

**Setting and Duration:** The study was carried out at the Department of Obstetrics and Gynaecology in Sir Ganga Ram hospital, a tertiary care facility affiliated with Fatima Jinnah Medical College, from July 2007 to July 2010.

**Patients and Methods:** A detailed questionnaire was prepared, which included socio demographic data and questions about knowledge and attitudes towards sterilization after three or more caesarean sections. It explored reasons why women do not opt for tubal ligation after three or more caesarean sections, even though it increases their risks regarding morbidity and mortality. One thousand and twelve women who refused sterilization with caesarean section (after three or more caesarean sections) were interviewed. Results were calculated in the form of percentages.

**Results:** One thousand and twelve women were interviewed. Sixty percent women were married before the age of 20 years. Most of the women were housewives (86%). Economically independent women were just 2.5%. A total of 65.4% women had an education of less than 4 years, 26.7% had an education of 5-9 years, and 4.1% had 10 or more years of education. 2.3 % were professionals. Most of them claimed that the decision for refusal of ligation was made by husband and mother in law (71%). The reasons behind the decision were: desire for sons (38%), more children (33%), religious beliefs (15.7%) and fear of side effects (45%). A small minority (0.05%) stated that their husband will undergo vasectomy instead. Another factor that played an important role was failure by health care providers to counsel them regarding risks of repeated caesarean sections (42%). In 2% of the cases surgeons were unable to find the tubes due to adhesions.

**Conclusion:** Our study leads us to conclude that lack of health education and awareness, low education level, economic dependence, social power of husband, desire of the sons in the family are the major contributory factors. Moreover, counseling services are not meeting the needs of the potential clients resulting in lack of motivation.

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## INTRODUCTION

As estimated 17,000 mothers and 400,000 infants die annually in Pakistan, which translates into a high maternal mortality ratio 276/100,000 and infant mortality rate, 78/1000<sup>1</sup> Such a high mortality rates should be unacceptable in any country. We are trying very hard to meet the millennium development goals to decrease the maternal, neonatal and infant mortality rates but there are many factors that hinder our struggle<sup>2</sup>. Leading causes of maternal mortality in Pakistan are still haemorrhage (27%), infections (14%), hypertensive states (10%) and severe anaemia.<sup>1</sup>

Though delivery through abdominal route can be a life saving technique for both the mother and infant yet it is associated with increased risks to the mother. These risks are in the form of

haemorrhage, infections, injury to adjacent structures, transfusion hazards, and anesthetic complications and in subsequent pregnancy uterine rupture, placenta previa, and morbidly adherent placenta. Mortality is 2-4 times higher than vaginal birth. Three lower segment caesarean sections are a norm all over the world but increasing number of caesarean sections increase risks to the mother. Although with every caesarean section the risks are increased even then many of our women do not opt for sterilization (tubal ligation as a permanent method of contraception) after three or more caesarean sections.

In this study we want to focus on those factors which influence our women to put their lives to so many potential risks with repeated caesarean sections. The study may add to our current knowledge how to address these factors.

## PATIENTS AND METHODS

The study was carried out at the Department of Obstetrics and Gynaecology in Sir Ganga Ram hospital, a tertiary care facility affiliated with Fatima Jinnah Medical College, from July 2007 to July 2010.

A detailed questionnaire was prepared and was pre-tested. It included socio demographic data and questions about knowledge and attitudes towards sterilization after three or more caesarean sections. It explored reasons why women do not opt for tubal ligation even after three or more caesarean sections which impose increased morbidity and mortality. The questions encompassing the methods of contraception being used or not were added. Regarding knowledge, it was explored whether or not they were aware of the hazards of repeated caesarean section and if counseling had been done in the antenatal period. Their fears and main reason for denial were addressed. Their perceptions about any negative effects on health after sterilization were asked. Women were directly questioned that if they think that the procedure is related to menstrual or sexual problems. Their concepts about relationship with cancer or negative psychological effects on their womanhood were explored. One thousand and twelve women who refused sterilization with caesarean section (after three or more caesarean sections) were interviewed. Results were calculated in the form of percentages.

## RESULTS

One thousand and twelve women were interviewed. Sixty percent women were married before the age of 20 years. Most of the women were housewives (86%). Economically independent women were just 2.5%. A total of 65.4% women had an education of less than 4 years, 26.7% had an education of 5-9 years, and 4.1% had 10 or more years of education. 2.3 % were professionals. Most of them claimed that decision was made by husband and mother in law (71%). 81.5 % had unplanned pregnancy. 58 % had knowledge about different methods of contraception and 13.8 % actually used contraceptive methods other than natural methods. 83% had some knowledge about tubal ligation out of which from doctors 21%, LHV 11%, relatives 55% and 1.6 % had read about it. The reasons behind the decision were: desire for sons (38%), more children (33%), religious beliefs (15.7%) and fear of side effects (45%). A small minority (0.05%)

stated that their husband would undergo vasectomy instead. Another factor that played an important role was failure by health care providers to counsel them regarding risks of repeated caesarean sections. In 2% of the cases surgeons were unable to find the tubes due to adhesions.

## DISCUSSION

Our study strongly highlights the unfavourable status of the women in the society.

The area of interest in this study is that it targets the indirect causes of maternal morbidity and mortality in the form of unfavourable status of women reflected in poverty, low education, economic dependence, lack of access to health care, lack of power of making independent decisions and consideration of sons as their power. They are not involved in decision-making processes even though the decisions directly affect their lives and health. Economic dependence on the family further compounds their problems. Poverty and level of education work as independent additional indicators in this respect. According to Pakistan demographic and health survey 2006-7 family planning use increases dramatically with women education similarly in our study the decision to limit family size was affected by women education<sup>1</sup>. As Pakistan's population swells—with 41 percent younger than age 15—the links among education, health outcomes, and population size become increasingly important. Worldwide, study after study shows educated mothers have smaller, healthier families.<sup>2</sup>

Women who are more educated, they plan and discuss the matter with their husbands. They are also economically independent and involved in decision-making. The PDHS results underscore this universal truth: educated women are more likely to use modern contraception, to get prenatal care, to deliver in a health facility, to ensure their children are fully immunized, and to get appropriate care for their sick children. In short, the evidence shows educating girls is a healthy investment for Pakistan and its future generations.<sup>1</sup> In Pakistan the infant mortality rate for babies of women with no education is 84 deaths per 1,000 births compared to only 56 deaths per thousand live births for babies whose mothers have higher education<sup>1</sup>. Educated women are twice as likely as women with no education to get prenatal care from a skilled provider (96 percent compared to 50 percent). Total family size is large as children are perceived as assets especially in poor classes.

They grow up and serve as additional working hands for the family. The status of sons is again is very strong as they bring social respect for the mother and are able to look after them in future. Data review by Peterson HB in 2008 suggested that sterilization is used by more people than any other method and have low risk of complications of surgery<sup>3</sup>. In different studies as one by Wandabwa J and others in 2008 suggested that uterine rupture is still a common problem in poor countries especially after caesarian section and monitoring of labour and limiting family size decrease the risk<sup>4</sup>. Hence our study also tries to identify the risk factors that why women whether or not know about the consequences of repeated caesarean section . Even if they know the risks why they do not opt to limit their family size. In this study 45% of women had negative perceptions about effect of sterilization on health while studies as by Von Mering R in 2003 and Patis in 2000 report no evidence of tubal ligation causing menstrual abnormalities. The risk of cancer of breast, cervix or endometrium is not increased and of ovarian cancer is even reduced<sup>5,6</sup>. Hence extensive counseling of women and their families is needed in our set up. Especially women of low socioeconomic group and those who are less educated are more prone to refuse. These results are reinforced by other studies as by Abu Ahmed A. in 2003.<sup>7</sup>

In a study by Susan Philliber in 1992 barriers affecting the decision for sterilization among poor women were taken in account. The barriers were different from our study in a manner that they identified repeated clinic visits, non availability of weekend surgery and lack of knowledge that 30 day waiting time can be waived off in postpartum period and funding problem<sup>8</sup>. As it was for day care tubal ligation and our study revolved around ligation with caesarean section so some factors are different. But low economic status and poor counseling were the same factors.

The study invites ideas for future studies identifying more factors affecting decision of ligation after repeated caesarean sections. Involvement of bigger groups and control groups may be needed.

### CONCLUSION

Our study leads us to conclude that lack of health education and awareness, low education level, economic dependence, social power of husband,

desire of the sons in the family are the major contributory factors. Moreover, counseling services is not meeting the needs of the potential clients resulting in lack of motivation. The results reinforce the approach that we need to focus on increasing the knowledge of women and family as a whole about the health issues particularly reproductive health. Female education at least up to secondary level should be given top priority. As health care providers we should intensify information, education and communication programs on family planning as family planning saves lives through planned management of pregnancies. The areas to be targeted are prevailing early marriage, lack of socially rewarding alternative life goals besides motherhood, high infant and child mortality rates and lack of motivation. Male partners must be involved in badly needed comprehensive counseling session

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