# Barriers for non-acceptance of permanent method of family planning among eligible couples in a Teaching Hospital- A cross sectional study

Sunil Kumar Samal<sup>1,\*</sup>, Setu Rathod<sup>2</sup>, Seetesh Ghose<sup>3</sup>, P. Pallavee<sup>4</sup>

<sup>1,2</sup>Assistant Professor, <sup>3</sup>Professor & HOD, <sup>4</sup>Professor, Dept. of Obstetrics & Gynecology, Mahatma Gandhi Medical College & Research Institute, Pondicherry

## \*Corresponding Author:

Email: drsksamal1981@gmail.com

#### Abstract

**Background:** Although, sterilization during postpartum period has many advantages including technical simplicity and completion of two events delivery and sterilization simultaneously thus by saving time and resources, it has not achieved full acceptance.

Aims & Objective: The aim of the study to estimate the numbers of eligible couples who do not accept a permanent method of family planning during postpartum period [Female- Puerperal sterilization and Male- NSV/Vasectomy] and to identify the factors for non-acceptance of a permanent method of family planning

Materials & Methods: This was a cross sectional study conducted from November 2015 to October 2016[one year]. The study was conducted in postnatal ward, department of Obstetrics & Gynaecology. The study subjects include postpartum mothers with their spouse who have completed their families but declined to adopt any method of permanent sterilization (Non-acceptors).

**Results:** Among the non-acceptors, most common reasons in case of wife were feeling of lack of strength for surgery (59%), fear of not able to do hard work after surgery(51.5%) and fear of lack of people in the home to look after surgery(33.3%). For males, loss of masculinity or libido (66.6%), belief of not able to do hard work after surgery (61.3%) and fear of not having enough strength for surgery (33.3%) were the major barriers for acceptance. In case of Muslim couples (21.2%) religious reason is one of the important causes for non-acceptance. The factor of having at least on male child was a major deciding factor for acceptance of any method of permanent sterilization.

**Conclusion:** Lower socioeconomic status, ignorance about the procedure due to lack of knowledge, deep-rooted belief of weakness caused due to operation and preference for at least one male child are some of important barriers for acceptance of any permanent family planning method among eligible couples. Awareness, counseling and motivation about family planning methods and clearing the myths about family planning procedures and promotion of small family norm should be followed to help the eligible couples to select any method of permanent family planning.

Keywords: Contraception, Family planning, Tubectomy, Sterilization

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## Introduction

Permanent surgical contraception, also known as voluntary sterilization, is a surgical method whereby the reproductive function of an individual male or female is purposefully and permanently destroyed. The operation done on male is vasectomy and that on the female is tubal occlusion, or tubectomy. (1) Puerperal sterilization done during the postpartum hospital stay has many advantages. It is technically simple while hospital stay and rest at home following delivery are enough to help the patient to recover simultaneously from the two events, i.e. delivery and operation. The Collaborative Review of sterilization (CREST) demonstrated that tubal occlusion by post-partum partial salpingectomy had the overall lowest failure rate of all methods of sterilization (7.5/1000).(2) It saves time and resources for lower socioeconomic groups.

In India, Family Planning Programme was started in the year 1952 and was the first country in the world to do so. Since then its name has changed to Family Welfare Programme and lastly to the present Reproductive and Child Health (RCH) Programme.<sup>(3)</sup>

This change was made particularly to emphasize more and also to increase the acceptance of contraceptive methods by reproductive age group people. The extent of acceptance of contraceptive methods still varies within and between societies and also among different castes and religion groups. The factors responsible for such varied picture operate at the individual, family and community levels with their roots in the socioeconomic and cultural milieu of India society. (4) Of the different methods of Family Planning, sterilization accounts for 70% of which tubectomy remains the mainstay. (1)

Despite its convenience, safety and efficacy, not all women who desire postpartum sterilization actually have the surgery. Keeping this in view, it would be important to know what are the barriers which prevent these eligible couples from adopting any permanent family planning method.

## Materials & Methods

This was a cross sectional study conducted in Mahatma Gandhi Medical College & Research

Institute, Pondicherry from November 2015 to October 2016[one year]. Our research question or hypothesis was that in spite of so many advantages of sterilization during puerperal period, why there was a low acceptance for this method and what were the barriers for this non-acceptance. The study was conducted in ward, department of Obstetrics postnatal Gynaecology. The study subjects include Post-partum mothers admitted in postnatal ward of the department of Obstetrics and Gynaecology, MGMC&RI hospital along with their spouses who have completed their families. The selection of subjects done according to inclusion and exclusion criteria. Inclusion criteria was all Postpartum mothers who had undergone an uncomplicated vaginal delivery with at least one living child of one year of age along with their spouses. Exclusion criteria were: 1. Primipara 2. Postpartum mothers with complicated vaginal delivery 3. Risk factors in child like IUGR, preterm, Meconium stained liquor, neonatal jaundice and features of sepsis 4. Caesarean delivery. Eligible couples satisfying the inclusion criteria were enrolled in the study with their consent. Data collection was done from eligible couples who agreed to participate in this study by using structured questionnaire. All participants were informed that their responses would remain confidential. The data was collected and analyzed critically to find out factors responsible for non-acceptance of permanent sterilization. Institutional ethical committee clearance was taken before starting of the study.

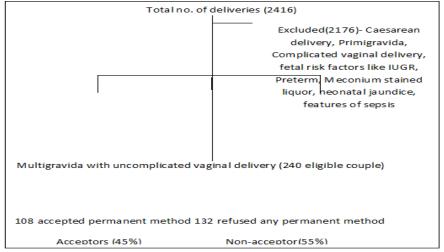


Fig. 1: Study Design

#### Results

Table 1: Demographic profile of eligible couples

Parameters		Wife (%)	Husband (%)
Age	21-30	66(50%)	36(27.2%)
	31-40	62(47%)	84(63.6%)
	>40	4(3%)	12(9.2%)
Religion	Hindu	78(59%)	78(59%)
	Muslims	28(21.3%)	28(21.3%)
	Christians	24(18.2%)	24(18.2%)
	Others	2(1.5%)	2(1.5%)
Cast	Forward	22(16.7%)	22(16.7%)
	Backward	44(33.3%)	44(33.3%)
	Most backward	48(36.4%)	48(36.4%)
	Others	18(13.6%)	18(13.6%)
Habitat	Rural	84(63.6%)	84(63.6%)
	Urban	48(36.4%)	48(36.4%)
Education	<sslc< td=""><td>38(28.8%)</td><td>31(23.5%)</td></sslc<>	38(28.8%)	31(23.5%)
	SSLC	52(39.4%)	55(41.7%)
	Graduate	32(24.2%)	39(29.5%)
	Post graduate	10(7.6%)	7(5.3%)
Occupation	Housewife	78(59.1%)	0

Agr	iculture worker	32(24.3%)	47(35.6%)
Lab	ourer	12(9.1%)	43(32.6%)
Bus	iness	6(4.5%)	30(22.7%)
Off	ice worker	4(3%)	12(9.1%)

Table 2: Family profile of eligible couples

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<b>Parameters</b>	Groups	No(Percentage)	
Family type	Nuclear	74(56%)	
	Joint	58(44%)	
Socio-economic	Upper	8(6%)	
Status	Upper middle	14(10.6%)	
	Lower middle	38(28.7%)	
	Upper lower	44(33.3%)	
	Lower	28(21.2%)	
Decision maker	Father-in-law	32(24.2%)	
in the family	Mother-in-law	54(41%)	
	Husband	40(30.3%)	
	Wife	4(3%)	
	Others	2(1.5%)	
Wife	Mother	62(45.4%)	
accompanied by	Mother-in-law	30(22.7%)	
whom to the	Husband	48(36.3%)	
hospital	Father	56(42.4%)	
	Father-in-law	21(16%)	
	Others	18(13.6%)	

Table 3: Reason for not accepting permanent method

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Reasons	Wife (%)	Husband (%)	
Willing to accept temporary methods of contraception	122(92.4%)	128(97%)	
Don't have enough strength	78(59%)	44(33.3%)	
Nobody is there to look after in home	44(33.3%)	42(31.8%)	
Want one more male/female child	28(21.2%)	28(21.2%)	
Fear of losing masculinity/sexual arousal	0	88(66.6%)	
Can't do hard work	68(51.5%)	82(61.3%)	
Religious reasons	28(21.2%)	28(21.2%)	

**Table 4: Temporary methods of contraception** 

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Type	Wife (%)	Husband (%)	
Natural method	42(31.8%)	74(56%)	
Barrier method	0	58(44%)	
IUCD	28(21.2%)	-	
Progesterone only Pill	62(47%)	-	
Long acting	0	-	
injectables			

Table 5: Types of permanent sterilization accepted by couples

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		Wife	Husband
Puerperal		108	-
sterilisation			
Non	scalpel	-	0
vasectomy			

Table 6: Number of couples having at least one male child

Types		At least one male child	All female child
Acceptor	of	98(90.7%)	10(9.3%)
permanent			
sterilisation			
Non acceptor	of	30(22.7%)	102(77.3%)
permanent			
sterilisation			
Stermsation			

Table 1 showed that most common age group among non-acceptors is 21-30 years (50%) for women and 31-40 years (63.6%) for their spouses. 59% of couples were Hindus, 21.3% Muslims and 18.2% couples belong to Christian community. Majority of the couples 92(69.7%) belong to backward and most backward class. 84(63.6%) couples reside in rural area. Most of the non-acceptors were educated up to either 10<sup>th</sup> (SSLC) or less than 10<sup>th</sup> (<SSLC). Most of the women were housewives (59.1%) while men were agriculture workers (35.6%) or labourer (32.6%).

Table 2 revealed that family profile of the eligible couples who were not willing for permanent method of sterilization. 56% of the couples live in nuclear family while 44% live in a joint family. In most of the cases of joint families (41%), Mother-in-law is the decision maker in the family. Most of the couples 72(54.5%) belong to low socio-economic status and most of the time pregnant mothers (45.4%) were accompanied by their mother while they come for confinement.

Table 3 highlighted about the reasons for non-acceptance of permanent sterilization. Most common reasons in case of wife were feeling of lack of strength for surgery (59%), fear of not able to do hard work after surgery(51.5%) and fear of lack of people in the home to look after surgery(33.3%). For males, loss of masculinity or libido (66.6%), belief of not able to do hard work after surgery(61.3%) and fear of not having enough strength for surgery(33.3%) were the major barriers for acceptance. In case of Muslim couples (21.2%) religious reason is one of the important causes for non-acceptance. But majority of the couples (92.4%)

women and 97% men) were willing to accept any temporary methods of contraception.

Table 4 revealed the different temporary methods of contraception preferred by the couples instead of permanent sterilization. Most of the women prefer progesterone only pills (47%) followed by natural methods like lactational amenorrhoea(LAM)[31.8%] and 21.25 opted for intrauterine copper devices(IUCD). Among men, 48% preferred barrier methods like condom and 56% preferred natural methods like calendar method or coitus interrupts.

Table 5 showed that among the eligible couples who had undergone permanent sterilization, in all cases female sterilization (Tubectomy by modified Pomeroy's method) done. In Table 6 it is shown that the factor of having at least on male child was a major deciding factor for acceptance of any method of permanent sterilization. Among the acceptors, 90.7% had at least one male child while in non-acceptors 77.7% were having all female Childs.

#### Discussion

According to National family health survey-4(NFHS-4)2015-16, (5) the female sterilization is 57.4% and male sterilization is 0% in Pondicherry, while it is 45% for female and 0% for male in our study which is comparable. Preference for at least one male child (90.7% among acceptors) was found as a major factor to accept permanent family planning. This was also reported by other authors in their study. (6-8) Most common age group among females was 21-30 years (50%) while in male, it was 31-40 years (63.5%) and this finding was supported by Soni RK et al in their study. (9) Muslim couples (21.3%) usually decline to adopt any family planning method because of religious reason and it was also reported by other authors in the literature. (8-9) Majority of the eligible couples (69.7%) belong to backward and most backward class declined to accept permanent sterilization because of the ignorance and belief of weakness after surgery and this was also reported by Makhija K et al<sup>(7)</sup> and Soni RK et al<sup>(9)</sup> in their studies. We found that most of the nonacceptors belong to low socioeconomic status like agricultural worker and labourer, while ignorance and fear of operation were the major factors among these groups for non-acceptance of sterilization. This finding also reported by different authors in literature. (9-10) It was found that nuclear family (56%), fear of weakness and the belief of nobody is there to look after in home was a major factor among non-acceptors and was also reported by Kumar R et al in their study. (11) In case of joint families the decision maker of the family was Mother-in-law and her preference for male child was a major factor to decide for sterilization. This was also reported by Kumar R et al in their study. (11) It has been found that majority of the women were accompanied by their mother during the hospital stay which is a family custom and this is followed in different parts of the

country as reported by different authors. (8-10) Among temporary methods female mostly preferred lactational amenorrhoea method (LAM), progesterone only pill and IUCD while male preferred natural and barrier methods of contraception in our study and this is also reported by different authors in literature. (9-10) We found that all acceptors for puerperal sterilization were female and no case of non-scalpel vasectomy and (NSV) was recorded. This is because of lack of awareness and counseling of male partner to overcome the fear of losing masculinity and sexual arousal after surgery. This was also reported by Athavale et al in their study. (6)

There are some international studies addressing the issue of missed postpartum sterilisation. Verkuyl et al(12) studied 284 women in Zimbabwe who did not undergo sterilisation despite their desire to do so. He found that the most common explanation given by the subject was that the attending health professional were poorly motivated to do the procedure. Potter and colleague<sup>(13)</sup> prospectively studied 1136 Brazilian women desiring postpartum sterilisation. Most women expressed desire for postpartum sterilisation over interval sterilisation. Yet, patients with private insurance were much more likely to undergo postpartum sterilisation than patients with public insurance. Therefore in both of the studies factors related to the healthcare system denied women a desired surgery. Zite N et al<sup>(14)</sup> studied 324 women who requested postpartum sterilization during antepartum care but did not undergo the procedure and found that the Medicaid consent process, medical conditions and insufficient operating room space prevented women from having the desired surgery.

### Conclusion

It is concluded from our study that lower socioeconomic status, ignorance about the procedure due to lack of knowledge, deep-rooted belief of weakness caused due to operation and preference for at least one male child are some of important barriers for acceptance of any permanent family planning method among eligible couples. For male, other factors like fear of loss of masculinity and loss of libido after procedure are found important barriers for acceptance of male sterilization. Hence we concluded that improvement in awareness and counseling about family planning methods, clearing the myths about family planning procedures and motivation for small family norm should be followed to help the eligible couples to select any method of permanent family planning.

## References

- Dutta DC. Population dynamics and contraception. In: DC Dutta's Textbook of Obstetrics. Ed. 7<sup>th</sup>. Jaypee Brothers Medical Publishers (P) LTD. New Delhi, India, 2013, p.552.
- Wulf, D. Female sterilization: a centennial conference. Fam Plann Perspect. 1981;13:24–28.

- Singh RKN, Devi TI, Devi TB, Singh YM, Devi TN, Singh NS. Acceptability of contraceptive methods among urban eligible couples of Imphal, Manipur. Indian Journal of Community Medicine 2004;29(1):13-7.
- Rao AP, Somayajulu VV. Factors responsible for Family Planning acceptance with single child - findings from a study in Karnataka. Demography India, 1999;28(1):65-73
- International Institute for population Sciences, Mumbai. National Family Health Survey-4 (NFHS- 4), India 2015-16: State fact Sheet Puducherry.
- Athavale SV, Athavale SA. Factors Influencing the Decision to Undergo Tubectomy in a Rural Area of Maharashtra State. Regional Health Forum WHO South-East Asia Region. 2003;7(2): 281.
- Makhija K, Kumar S. Sterilization decision: Reasons for delay by acceptors in a Haryana village. Indian Journal of Maternal and Child Health. 1991;2(1):25-27.
- Joshi V, Saroja K. Fertility and adoption of tubectomy among rural women. Journal of Family Welfare. 1988;34(3):57-63.
- Soni RK, Sachar RK, Gill PJ. A comparative study of sterilization acceptors. Indian Journal of Maternal and Child Health.1992;3(3):82-84.
- Kumar P. Social classification Need for constant updating. Indian Journal of Community Medicine 1993;27(2):60-61.
- Kumar R, Singh MM, Kaur M. Dynamics of contraceptive use in a rural community of Haryana. Indian Journal of Medical Sciences. 1999;53(5):201-211.
- 12. Verkuyl, D.A. Tubal ligation candidates who did not get their operation. Cent Afr J Med. 1996;42:150–2.
- Potter, J.E., Perpetuo, I.H., Berquo, E. et al, Frustrated demand for postpartum female sterilization in Brazil. Contraception. 2003;67:385–90.
- Zite N, Wuellner S, Gilliam M. Barriers to obtaining a desired postpartum tubal sterilisation. Contraception 2006;73(4):404-7.