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A study on socio-demographic and cultural factors influencing women undergoing laparoscopic tubectomy in laparoscopic tubectomy camps conducted at UHTC, Aam Talaab, Raichur

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Abstract

Introduction: The National Family Planning Program was started way back in 1952 and despite of political commitment, has yet to make the desired impact. National Family Health Survey (NFHS)-3 data shows that among contraceptive methods, 37.3% contribute for tubectomy. India is a country of great diversities of religion, culture, socioeconomic status and literacy. These factors influence the acceptance of family planning methods to a great extent.

Objectives: To study the socio-demographic and cultural factors influencing women undergoing laparoscopic tubectomy in Laparoscopic tubectomy camp at UHTC, Raichur.

Methodology: Women coming for tubectomy operation from April 2016 to June 2016 in tubectomy camps conducted at a UHTC, Raichur. All the 223 women who came for tubectomy during study period were enrolled.

Results: Mean age of undergoing tubectomy was 27 years. 56.95% of females were illiterate, where as 45.73% of their husbands were illiterate and average family size was 3.17. In 55.60% cases, FHW was the motivator.

Conclusion: At least one male child was present in all the families except four. In most of the cases decision was taken by husband. Son preference is seen to be an important factor on decision making on tubectomy.

Keywords: Tubectomy, Family Planning, Cultural Factors, Socio-demographic Factors.

Introduction

India is the second most populous country in world with 1.21 billion people, comprising 624 million males and 587 million females.(1) Thus India faces the daunting task to curb the menace of growing population. The Government of India has been taking various steps to combat this problem since independence. The National Family Planning Program was started way back in 1952 and despite of political commitment, has yet to make the desired impact. National Family Health Survey (NFHS)-3 data showed that among contraceptive methods, 37.4% contribute for tubectomy.(2)

Knowing the fact that increased male sterilization would provide a great hand in family planning, still it's not at fledge in any part of our country. Two important reasons for this were the dominance of male in decision making of family planning and the social stigma in women which they will face if there was a failure of male sterilization and ending up in pregnancy. It would take many decades to bring this awareness in people and make things easy. This has made Tubectomy a main tool of family planning. As a reason for which concentration should be given in promoting tubectomy.

India is a country of great diversities of religion, culture, socioeconomic status and literacy. These factors influence the acceptance of family planning methods to a great extent as it was found in studies done previously. A study conducted by Prayag A in Belgaum, Karnataka showed many socio demographic and cultural factors like parity, number of male children, educational & economical status, type of family, age at marriage affect the women undergoing tubectomy.(3)

Banerjee B conducted a study in Kolkata and found that religion, number of living children, age, literacy, type of family, employment status of the women, and socioeconomic status of the family were the determinants of the acceptance of permanent method of sterilization in women.(4) In a research by Ojah J in Guwahati, city of Assam, found religion, age, educational status, income, parity, numbers of male and female children are the factors influencing the couple to accept the permanent method of female contraception.(5) A study by Lakshmi S G in Tirupati found age, locality (urban/rural), income, religion, education and occupation were the factors influencing the choice of Permanent Method of Family Planning.(6) Our study has been conducted to know what extent various factors affect the acceptance of tubectomy among women from Raichur.

Aims and Objectives of study

1. To study the socio-demographic factors influencing women undergoing laparoscopic tubectomy in Laparoscopic tubectomy camp at UHTC, Raichur.
2. To study the cultural factors influencing women undergoing laparoscopic tubectomy in Laparoscopic tubectomy camp at UHTC, Raichur.

Materials and Methods

Study design: The present study was a cross-sectional study.

Study setting: The study had been undertaken at UHTC, Aam Talaab, Raichur, which is affiliated to Raichur Institute of Medical Sciences, Raichur.

Study period: April 2016 to June 2016. (3 months).

Inclusion criteria: Women undergoing laparoscopic tubectomy in laparoscopic tubectomy camps at UHTC, Aam Talaab, Raichur during above study period and who gave consent.

Exclusion criteria: Women who didn't give consent for their participation in the study.

Sample size: Laparoscopic tubectomy camps are conducted at UHTC, Aam Talaab, Raichur twice in a month. Women from Raichur city and villages around the Raichur city attend these camps. Around 60 to 70 women undergoes laparoscopic tubectomy in each camp. Four Laparoscopic Tubectomy camps were organized during study period. All women who attended, these laparoscopic tubectomy camps during the study period i.e. April 2016 to June 2016, were taken as sample size for the study. Total 223 women who attended the laparoscopic tubectomy camp during study period and gave consent, were part of study.

Method of collection of data: Ethical clearance for the study was taken from Institutional Ethical Committee of Raichur Institute of Medical Sciences, Raichur, Karnataka. Permission was taken from District Health Officer of Raichur city and from the Lady Medical Officer of UHTC, Aam Talaab, Raichur to conduct the study. Data was collected using a pre-tested semi structured questionnaire after taking the verbal consent of the women and explaining each question to them.

Statistical Analysis: The data was analyzed by MS Excel and presented by percentage, mean, standard deviation. Pie- chart, Bar Diagram were made to present data.

Results

Majority of them (86.1%) belonged to Hindu religion. It was observed that 80.7% of participants belonged to Nuclear family. Majority of tubectomy acceptors i.e. 103 (46.18%) belonged to age group of 21-25 years followed by 26-30 years which constituted 92(41.26%) of them. Mean age of participants was 27.04 ± 3.58yrs. Most of the participants i.e. 81% were from nuclear family, 12% from three generation family and 7% had joint family. Of the 223 women, 144(64.6%) belonged to class IV and 69 (30.93%) were from class III socio-economic class according to Modified BG Prasad classification. (Table 1)

It was observed that 46.63% of participants had at least two children and 53.37% had 3 children and above. Mean number of children in the family was 3.17± 0.98. At least one male child was present in all the families except for four families. (Table 1)

Table 1: Distribution of basic Characteristics like Religion, Age, Type of family, Socio-economic status, Educational status, Employment status, Parity, No. of male children and No. of female children of the 223 beneficiaries of camp

Basic Characteristics of the Beneficiaries			
Basic Characteristics	**Category**	**Number**	
Religion	Hindu	192 (86.1%)	
	Muslim	31 (13.9%)	
Age	21-25	103 (46.18%)	
	26-30	92 (41.26%)	
	31-35	22 (9.86%)	
	>35	6 (2.69%)	
Type of family	Nuclear	180 (80.71%)	
	Joint	27 (12.13%)	
	Three Generation	16 (7.16%)	
Socio-economic status	CLASS I	0 (0%)	
	CLASS II	1 (0.44%)	
	CLASS III	69 (30.93%)	
	CLASS IV	144 (64.6%)	
	CLASS V	9 (4.03%)	
Educational status		**Women**	**Husband**
	Illiterate	127 (56.95%)	102 (45.73%)
	Primary school	14 (6.27%)	28 (12.55%)
	Middle school	63 (28.28%)	77 (34.52%)
	High school	19 (8.52%)	16 (7.17%)
Employment status	Employed	106 (47.53%)	
	Unemployed	117 (42.47%)	
Parity	2	104 (46.63%)	
	3	52 (23.31%)	
	4	47 (21.07%)	
	>4	20 (8.96%)	
No. of male children	0	4 (1.79%)	
	1	173 (77.57%)	
	2	37 (16.59%)	
	3	9 (4.03%)	
No. of female children	0	10 (4.48%)	
	1	78 (34.97%)	
	2	60 (26.90%)	
	3	63 (28.25%)	
	>3	12 (5.40%)	

It was seen that Family Health Worker (ASHA) motivated for tubectomy in 55.50% of the participants, Husbands contributed for 34.0% and in 10% cases elders in the family were motivators (Fig. 1).

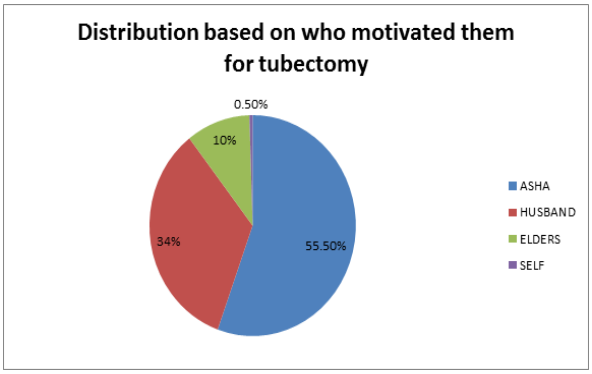

Fig. 1: Distribution based on who motivated them for tubectomy

On trying to know the reasons for sterilization it was found that 41.25% considered it was necessary for good upbringing of other children, 38.12% got it done for economic compulsion and 20.63% were satisfied after they had a male child. (Table 2)

Table 2: Distribution based on reason for tubectomy in the Beneficiaries

Distribution based on reason for tubectomy	
Reason	**Participants/Beneficiaries**
For good upbringing	92 (41.25%)
For economic compulsion	85 (38.12%)
Have a male child	46 (20.63%)

About 61.43% of the Study participants did not know about male sterilization. Decision to undergo sterilization was mostly 81 % decided by the husband, 11% by self and 8% by the couple (Fig. 2).

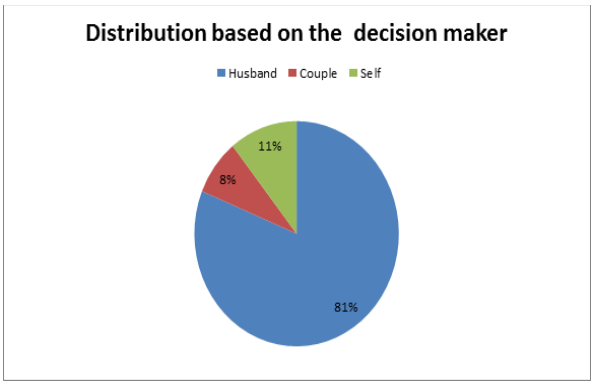

Fig. 2: Distribution based on the decision maker

Maximum 116 had 0/1 male children at the time of tubectomy belonged to Class IV. After applying Chi-square test for Socio- economic class and number of male children, χ^2 =12.29 with two degree of freedom, P value was 0.0021, which is statistically highly significant.(Table 3).

Table 3: Comparison between socio-economic status and the number of male children at the time of tubectomy

Socio-economic status	No. of male children at the time of tubectomy			
	0/1	**2/3**	**Total**	**P Value**
Class I, II & III	58 (82.86%)	12 (17.14%)	70(100%)	0.0021
CLASS IV	116 (80.56%)	28 (19.44%)	144 (100%)	
Class V	3 (33.33%)	6 (66.67%)	9 (100%)	
Total	177 (79.37%)	46 (20.63%)	223 (100%)	

χ^2 =12.29, df=2; (Some rows and columns has been merged as expected value were less than 5).

Maximum 104 had 0/1/2 female children at the time of tubectomy belonged to Class IV. After applying Chi-square test for Socio- economic class and number of female children, χ^2 = 6.789 with two degree of freedom, P value was 0.0336, which is statistically significant.(Table 4)

Table 4: Comparison between socio-economic status and number of female children at the time of tubectomy

Socio-economic status	No. of female children at the time of tubectomy			
	0/1/2	**3/more**	**Total**	**P value**
Class I, II & III	38 (54.28%)	32 (45.72%)	70 (100%)	0.0336
Class IV	104 (72.22%)	40 (27.78%)	144 (100%)	
Class V	6 (66.67%)	3 (33.33%)	9 (100%)	
Total	148 (66.37%)	75 (33.63%)	223 (100%)	

χ^2 =6.789, df=2; (Some rows and columns has been merged as expected value were less than 5).

Discussion

Female sterilization is the most widely known method of contraception in India. As per DLHS IV (2012-13), in Karnataka female sterilization accounted for 58% of which majority were from rural population, and male sterilization accounted for a mere 0.2%.[7] This clearly shows that impact to achieve family planning is mainly by female sterilization.

In our study the mean age of Sterilization among women was 27.04 years, Athavale AV et al had also reported 25 years as mean age at tubectomy with range of 19-30 years.[8] This showed majority of younger population were choosing permanent methods of contraception, suggesting that most of them had completed their family at an early age, following an early Marriage. Puwar B et al had found 56% of females in age group between 30-35 years, which differed from our study.[9]

In the present study 86.1% women were Hindu and 13.9% were Muslim. Comparable results were also observed by Rahman S with 66.7% of Hindu and 26% of Muslim adopting tubectomy.[10] Utilization of any method of contraceptive was found in 85.6% of Hindu and 14.4% of Muslim by Anant T et al.[11] Speizer et al in their study also reported that Muslim women are less likely to be sterilized than non-Muslim women.[12]

Mean number of children in the family was 3.17. Athavale et al reported mean family size of 2.36 children.[8] Total 46.63% of the participants had two living children and 53.37% had three or more living children in the family. Puwar B et al and Benjamin et al[13] have also reported similar results in their study. It also points to the fact that the total number of living children is also a significant factor associated with decision on tubectomy. In the era where we are trying to uplift one child norm policy all of the participants had two children.

In our study we found that 98.20% of participants opted for tubectomy only after having at least one male child in the family. After applying Chi-square test for Socio- economic class and number of male children, P value was 0.0021, which is statistically highly significant.(Table 3) This shows that with increasing socio-economic status more beneficiaries opt for tubectomy after having one male child than 2 or more male child. After applying Chi-square test for Socio-economic class and number of female children, P value was 0.0336, which is statistically significant.(Table 4) This shows that with increasing socio-economic status more beneficiaries opt for tubectomy after having one or two female child than 3 or more female child. Son preference in India arises from the perceived economic, social and religious utility of sons as compared to daughters also seen in a study by Gupta M et al.[14] Cain and his associates have argued that in areas where women were economically backward and dependent on their male family members, would be motivated to want a greater number of children, especially sons.[15]

In our study around 61.43% of participants were unaware of male sterilization, which means they had a false belief, that they had no other option and only they were the ones who had to undergo sterilization. On the contrary when a thought process is put on the rest 38.57% who knew about sterilization and still willingly opted for tubectomy, it can be assumed that the worrying factor in the females is the social stigma behind failure of vasectomy, along with it also a thought that complications following vasectomy may have an impact on the family economy, as he is the earning member. In 81.16% of the participants who opted for tubectomy, husbands were the sole decision maker, which also shows the impact of male dominance in opting for tubectomy.

Conclusion

At least one male child was present in all the families except four. Son preference is seen to be an important factor on decision making on tubectomy. In most of the cases decision was taken by Husband. Health issues of husband, financial loss and lack of awareness were major contributory factors for choosing tubectomy instead of vasectomy. The role of Family Health Worker in motivating women to undergo tubectomy is very important.

Recommendations

Creating awareness about vasectomy among people through IEC by health care providers, active involvement of men in family planning services is important. Female education in rural areas needs to be strengthened and incentives have to be provided. Involvement of ANM's and Anganwadi Teachers in promoting tubectomy has to be increased. Since son preference is linked to women's status in the Indian society, there is an urgent need to bring about widespread structural changes to enhance the status of women in the state. Self-help groups comprising mostly of housewives who will interact with health workers & the local governments should be formed to work in this direction. In addition to this motivational efforts have to be increased by the social workers and health staff to change the age old attitude of the people towards female children. The mother's preference for the male child should be addressed and they should be made to recognize the importance of the girl.

Limitations

Small sample size and men were not involved. As it was a free camp so most of the participants were from low socio-economic class which prevented us from making any association for undergoing tubectomy with socio-economic status and literacy level of participants.

Conflict of Interest: Nil

References

1. Chandramouli C. Census of India 2011. Office of the Registrar General and Census Commissioner. Govt. of India.2011 Available from: http://www.censusindia. gov.in/2011census/population_enumeration.html. [Last accessed on 2016 May 25].
2. International Institute for Population Sciences (IIPS) and Macro International. 2007. National Family Health Survey (NFHS-3), 2005–06: India: Volume I. Mumbai: IIPS.
3. Prayag A, Ashtagi G S, Patil S K, Mallapur M D. Factors Influencing Tubectomy Among Women of Rural Belgaum: A Cross-Sectional Study. International Journal of Scientific Research. 2015;4(5):645-7.
4. Banerjee B, Socioeconomic and cultural determinants on acceptance of permanent method of sterilization, Kolkata, India. The journal of family welfare. 2004;50(1):54-8.
5. Ojah J, Baruah M K, Baishya A C. Profile of beneficiaries of permanent sterilization From urban slum of Guwahati city of Assam, J Obstet Gynaecol Barpeta. November 2014;1(2):90-4.
6. Lakshmi SG, A study on Factors Influencing the choice of Permanent Method of Family Planning, Tirupati, India. *IOSR* Journal of Dental and Medical Sciences. 2015;14(6):16-22.
7. International Institute for Population Sciences (IIPS), 2014. District Level Household and Facility Survey (DLHS -4), 2012-13: India. Karnataka: Mumbai: IIPS.
8. Athavale AV, Athavale SA. Factors influencing the decision to undergo tubectomy in rural Area of Maharashtra. Regional Health: Forum WHO South East Asia Region. 2003;7:42-7.
9. Puwar B, Patel V, Patel M. factors affecting sterilization operation among couples of a rural area in Ahmedabad: A Record based study. Indian J Med Sci. 2012;66:267-72.
10. Rahman S. Comparative Study of acceptability of contraceptive methods among married women in reproductive age in urban slum and rural area of Rani Block, Kamrup District, Assam [Thesis]. Guwahati: Guwahati University; 2007.
11. Anant TP, John A, Kumar D. Family Planning Practices in Rural Kerala. Scholars Journal of Applied Medical Sciences. 2014;2(1):19–21.
12. Speizer IS, Nanda P, Pramte A, Pillai G. Family Planning Use among Urban Poor Women from Six cities of Uttar Pradesh. J Urban Health. 2012;89(4):639-58.
13. Benjamin A I. A longitudinal follow up study of women undergoing laparoscopic tubal ligation in Ludhiana block of Punjab. Health and Population: Perspectives and Issues.1985;8:19-28.
14. Gupta M, Zambare M. Does son preference matter? A study from urban Maharastra. Indian J of maternal and child health. 2011;13:1-9.
15. Cain M, Khanam SR and Nahar S. Class, patriarchy and women's work in Bangladesh, Population and Development Review. 1979;5:405-37.