

Factors Influencing Tubectomy Among Women of Rural Belgaum: A Cross-Sectional Study



Medical Science

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Dr. Abhishek Prayag	Post Graduate, Dept. of Community Medicine, J.N. Medical College, Belagavi, Karnataka
Dr. Girija S. Ashtagi	Associate Professor, Dept. of Community Medicine, J.N. Medical College, Belagavi
Dr. Shrinivas Krishnagouda Patil	Post Graduate, Dept. of Community Medicine, J.N. Medical College, Belagavi
Mr. M D. Mallapur	Assistant Professor, Dept. of Community Medicine, J.N. Medical College, Belagavi

ABSTRACT

India was the first nation to formulate a national family planning program in year 1952. In India, sterilization accounts for 38.3% in total, with 37.5% female sterilization and 1% male sterilization.

Objectives: To know various factors influencing Tubectomy among women of rural area.

Methodology: Women seeking Tubectomy operation from Jan to June 2014 from three PHC's in Belgaum were taken for study. All the 263 females who came for tubectomy were enrolled from these three rural areas.

Results: Mean age of undergoing tubectomy was 25.9 years. 37% of females were illiterate, where as 22% of their husbands were illiterate and average family size was 2.6. Education of the couple was significantly related to number of living children. In 37% cases, FHW was the motivator.

Conclusions: At least one male child was present in all the families except eight. Education of both the parents emerged as an influencing factor in deciding the size of the family. Son preference is seen to be an important factor on decision making on tubectomy.

Introduction:

India is the second most populous country in world with 1.21 billion people, comprising 624 million males and 587 million females¹. 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. India is a country of great diversities of religion, culture, socioeconomic status and literacy.

According to NFHS 3 survey about 12.8% of currently married women in India, have unmet need for Family Planning². The unmet needs for spacing of birth is similar to unmet needs for limiting births. 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 are the dominance of male in decision making of family planning and the social stigma in women which they will face if there is 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. There are many hindrances here too, especially in rural areas. There are studies done in rural areas to know various causes influencing tubectomy decision in women, but the factors differ from region to region. So, this study was undertaken to know the factors influencing tubectomy in three PHC's coming under Public Private Partnership with J.N. Medical College, KLE University Belagavi.

Materials and Methods:

A cross-sectional study was undertaken from Jan 2014 to June 2014 in three PHC's i.e. Kinaye, Handiganur and Vantamuri coming under field practice area of J.N. Medical College, KLE University. About 263 women who got admitted to these PHC's seeking tubectomy from January to June 2014 constituted the study sample. Detailed information on Sociodemographic profile, married life, number of children, etc. were taken a day just before the surgery in respective PHC's. The health facility was visited by the author and health facilities sterilization services were interviewed at health facilities after informed consent. Participants

were included on the basis of willingness to give consent for interview.

Results:

Majority of them (93.9%) belonged to Hindu religion. It was observed that 63.9% of participants belonged to Joint family. Majority of tubectomy acceptors i.e. 155 (58.9%) belonged to age group of 25-29 years followed by 20-24 years which constituted 83(31.6%) of them (**Table 1**). Mean age of participants was 25.9 ± 2.89yrs. Of the 263 women, 213(81%) belonged to below poverty line.

Table 2 shows 49.8% of participants and 63.5% of their male counterparts were educated up to high school and above. **Table 3** shows that education of the participant was significantly related with the total number of living children in the family (chi square 25.46, P=0.001), so did education of father (chi square 15.64, P=0.001).

It was observed that 52.5% of participants had at least two children and 46.1% had 3 children and above (**Table 5**). Mean number of children in the family was 2.6 with 95% CI (2.50-2.70), that of female children was 1.33 and male was 1.19. At least one male child was present in all the families except eight. Most of the women i.e. 45% underwent sterilization operation when the age of the last living child was less than one month and 42.5% did it when the age of the child was 1-2 years.

It was seen that elders in the family motivated for tubectomy in 40.7% of the participants, ANM's contributed for 35%. About 57.8% of the Study participants did not know about male sterilization. Decision to undergo sterilization was mostly (49.4%) decided by the couple, followed by 37.6% cases in which the decision maker was the husband (**Table 4**). On trying to know the reasons for sterilization it was found that 40.3% of them were satisfied after having a male child, while 35.4% considered it was necessary for good upbringing of other children and 24.3% got it done for economic compulsion.

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%.³ 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 25.9 years, Athavale AV et al. had also reported 25 years as mean age at tubectomy with range of 19-30 years.⁴This shows majority of younger population are choosing permanent methods of contraception. Mean number of children in the family was 2.6, suggesting that most of them have 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 differs from our study.⁵

In our study it was observed that 31.6% of females were illiterate and 49.7% of female were educated above primary level, whereas Puwar B et al. 45% of the females were illiterate, 31% were educated up to primary level and 24% were educated beyond primary level.23% of their husbands were illiterate and 63.5% had studied above primary level, suggesting husband's education has also an impact on decision of tubectomy. Education of the participant as well as that of husband was significantly related with the total number of living children, which further supported the importance of education. Thus for control of population growth, literacy is one of the important tool.

Mean number of children in the family/family size was 2.6. Athavale et al. reported mean family size of 2.36 children. Total 52.5% of the participants had two living children and 46.1% had three or more living children in the family. Puwar B et al. and Benjamin et al⁶. 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 more than 95% of the participants had atleast two children or more. In our study we found that 96% of participants opted for tubectomy only after having atleast one male child in the family. 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 Maneesha et.al⁷. Cain and his associates have argued that in areas where women are economically backward and dependent on their male family members, will be motivated to want a greater number of children, especially sons as an insurance against the risk of divorce, widowhood and old age⁸⁻⁹, their statement holds good with our study were majority of the participants i.e. 81% belonged to below poverty line.

In our study around 59% of participants were unaware of male sterilization, which means they had a false belief, that they had no other go and only they were the ones who had to undergo sterilization. On the contrary when a thought process is put on the rest 41% 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 37% of the participants who opted for tubectomy, husbands were the sole decision maker and in 49.4% cases the couple decided on it, which also shows the impact of male dominance in opting for tubectomy.

CONCLUSION:

Atleast one male child was present in all the families except eight. Education of both the parents emerged as an influencing factor in deciding the size of the family. Son preference is seen to be an important factor on decision making on tubectomy. Joint family pattern and education have enabled early decision on tubectomy Most of the time decision was taken jointly by both the partners.

RECOMMENDATIONS:

Female education in rural areas needs to be strengthened and incentives have to be provided. Awareness of Male sterilization has to be increased .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.

TABLE 1 : DISTRIBUTION OF STUDY PARTICIPANT'S ACCORDING TO THEIR AGE

AGE IN YEARS	PARTICIPANTS	PERCENTAGE
20-24	83	31.6%
25-29	155	58.9%
30-34	20	7.6%
≥35	5	1.9%
TOTAL	263	100%

TABLE 2 : DISTRIBUTION OF COUPLES ACCORDING THEIR EDUCATIONAL STATUS

EDUCATION	PARTICIPANT(%)	HUSBAND(%)
Illiterate	83 (31.6%)	59 (22.4%)
Primary	49 (18.6%)	37 (14.1%)
Secondary	120 (45.6%)	133 (50.6%)
> Secondary	11 (4.2%)	34 (12.9%)

TABLE 3 : ASSOCIATION BETWEEN EDUCATION OF THE COUPLE AND TOTAL NUMBER OF LIVING CHILDREN

EDUCATION	≤ 2 CHILDREN	> 2 CHILDREN	TOTAL	X ²	P VALUE
Education of the participant with total living children in the family					
Illiterate	26 (31.3%)	57 (68.7%)	83	25.467	P<0.001
Primary	32 (65.3%)	17 (34.7%)	49		
Secondary	76 (63.3%)	44 (36.7%)	120		
Above secondary	8 (72.7%)	3 (27.3%)	11		
Education of the husband with total living children in the family					
Illiterate	24 (40.7%)	35 (59.3%)	59	15.646	P <0.001
Primary	18 (48.6%)	19 (51.4%)	37		
Secondary	72 (54.1%)	61 (45.9%)	133		
Above secondary	28 (82.4%)	6 (17.6%)	34		

TABLE 4 : DECISION OF UNDERGOING TUBECTOMY

DECISION MAKER	PARTICIPANTS NO.	PERCENTAGE
Personal	20	7.6%
Couple	130	49.4%
Husband	99	37.6%
Others	14	5.3%

Table 5 : DISTRIBUTION BASED ON NUMBER OF LIVING CHILDREN

Number of living children	Participants	percentage
1	4	1.50%
2	138	52.50%
3	90	34.20%
4	22	8.40%
>4	9	3.50%

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