

Knowledge and Acceptance of Vasectomy among Married Men in a Rural area of Uttar Pradesh

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Abstract

Introduction: This study explored knowledge of vasectomy and its acceptance as a method of contraception among married males residing near RHTC of a tertiary care hospital in Amroha, Uttar Pradesh.

Methods: A population based cross-sectional study was undertaken in a rural health training centre field practice area of a tertiary care hospital at Amroha from 1st August 2019 to 10th January 2020 using a pre-tested, self-administered questionnaire.

Results: There were 250 male participants with a mean age of 32.6 ± 1.1 years. The largest proportion of respondents was from age group 31-35 (26%). The vast majority were Hindu (41%) followed by Buddhists (18%) & Muslims (17%). Out of total 250 married males interviewed after taking consent, 9.6 % were having high level of knowledge, 20.8% were found to have adequate level of knowledge, 65.2% were having low level of knowledge and 4.4% were having very low level of knowledge. Out of 250 participants, only 29(11.6%) were interested in undergoing vasectomy, 63(25.2%) agreed for vasectomy conditionally and 158(63.2%) study subjects denied for undergoing vasectomy after completion of their family.

Conclusion: Married males in the study area have low acceptance for vasectomy as a contraceptive method.

% percent of married males under study were having high and adequate knowledge of vasectomy. 69.6% percent were found to have low and very low knowledge about vasectomy which indicates lack of proper awareness among married males about vasectomy, a well known contraceptive method.

Keywords: Knowledge, acceptance, Married men, vasectomy, Public Health

I. Introduction

Vasectomy is an effective and permanent method of contraception. It is best for men who are certain they don't want children. It doesn't have any lasting effects on sexual activity or performance. It is easier and less expensive than female sterilization. Vasectomy was of incisional type when introduced but nowadays it is No Scalpel Vasectomy (NSV). No scalpel vasectomy was developed and first performed in China in 1954 by Dr. Li Shunqiang of Family planning Scientific Research Institute of China. Vasectomy was the most important method during 1956 and 1980 in India when it was used by 65% cases.⁵ But nowadays, Condom is the most preferred method and sterilization is the least preferred method of contraception.¹¹ Despite the fact that Vasectomy is safer, simpler, less expensive and equally as effective as female sterilization, it is not much utilized. Yet, in India female sterilization exceeds vasectomy in a ratio of 37 to 1 with a current rate of 4.4%.^{1,2}

Mutual decision of a couple before intercourse leads to birth of a healthy baby. Similarly contraception should also be a mutual decision and if needed, men should undergo vasectomy as it has more advantages than tubectomy. It is an opportunity for men to shoulder the responsibility. Still, low acceptance of vasectomy has been observed among men in India since many years. Even when men are aware of vasectomy, their information is frequently incomplete or incorrect. Evidence shows that patients who are knowledgeable about their conditions are able to actively participate in shared decision-making. Health care providers also have a responsibility to correct the misconceptions that men may have of vasectomy, especially if they are culturally biased and perpetuated over time. Failure to ensure patients' reception of accurate information may result in refusal of vasectomy by some men. However, A recent review of male involvement in family planning concluded that modern male methods (condoms and vasectomy) are underutilized, not because men oppose family planning, but because providers are unwilling or unable to provide men information and services to meet men's needs. Policy-makers and providers' lack of attention to the method, and sometimes even prejudices against it, are often obstacles to vasectomy services.^{7,8} Experience indicates that the promotion of vasectomy by the media and service providers and high-quality services draw clients and increase adoption rates.^{7,9}

One of the most important methods to evaluate the success of Family Planning Programmes is the evaluation of knowledge and acceptance of contraception methods among people.¹⁰ India is a patriarchal society and men are the dominant decision makers.⁴ The existing data on men's knowledge and acceptance of vasectomy is an important part of reproductive health and is very limited in India. Considering the importance

of these factors, the study therefore investigated the level of knowledge and acceptance of vasectomy among married males in rural health training centre area of tertiary care hospital of Amroha, Uttar Pradesh.

II. Material and Methods

A population based cross-sectional study was undertaken in a rural health training centre field practice area of a tertiary care hospital at Amroha from 1st August 2019 to 10th January 2020. A pilot study was conducted first amongst 50 subjects. Then a house to house visit was done. The study subjects were first explained the aim of study in detail in local language by a trained team member and then after taking their consent, data was collected carefully with a pretested, designed questionnaire targeting 21-50 years old married men. Privacy and confidentiality was ensured. Face to face interview was done to collect data. Only married males of desired age group who gave consent were included in study. Those who denied, unmarried, divorced, separated and widowers were excluded from the study.

The questionnaire sought for information on respondent's personal profile (Part 1), Knowledge of Vasectomy (Part 2) and acceptance of vasectomy as method of Contraception (Part 3). The score is the sum of 10 variables created by using a simple dichotomous scale (yes = 1/no = 0). Scores were not constructed in reference to an absolute gold standard, but rather were used for their relative values as simple tools in the analysis of men's knowledge of vasectomy. The knowledge section of the questionnaire consisted of 10 items; a score of 0–2 was defined as very low, 3–5 as low, 6–8 as adequate, and 8–10 as high. Acceptance which was classified as Unconditional and Conditional acceptance was assessed on the basis of answers to 3 pretested and pre-designed questions.

**Table 1: Study Questionnaire
Part 1: Socio-demographic details of study participants (n=250)**

S.No.	Socio-demographic Details	N (%)
1	Age	
	21-25	8 (3%)
	26-30	20 (8%)
	31-35	64 (26%)
	36-40	53 (21%)
	41-45	57 (23%)
2	Religion	
	Hindu	102 (41%)
	Muslim	43(17%)
	Buddhist	45(18%)
	Christian	18(7%)
	Others	42(17%)
3	Educational status	
	Illiterate	39 (15.6%)
	Above high school	132 (52.8%)
4	Employment status	
	Till High school or less	79 (31.6%)
	Working	168 (67.2%)
5	Duration of Marriage	
	Non working	82 (32.8%)
	0-10 years	102 (40.8%)
6	Number of Children	
	11-20 years	77 (30.8%)
	21 years and more	71 (28.4%)
6	Number of Children	
	0-2	153 (61.2%)
	3 and more	61 (24.4%)

Part 2:

Knowledge questions regarding vasectomy	Correct/Expected Answers (
Have you ever heard about male sterilization/Vasectomy	97 (38.8%)
Is there reduction in sexual desire after Vasectomy?	39 (15.6%)
Is vasectomy a permanent method of sterilization?	46 (18.4%)
Have you ever heard of Non scalpel vasectomy?	13 (5.2%)
Can STI be prevented after vasectomy?	17 (6.8%)
Is vasectomy easier method of sterilization than tubectomy?	26 (10.4%)
Use of Condom is a contraceptive method other than vasectomy?	241 (96.4%)
Did you ever discussed with health care worker/ Doctor regarding vasectomy?	94 (37.6%)
Is vasectomy cheaper than tubectomy?	78 (31.2%)
Source of information of knowledge about vasectomy	87 (34.8%)

Part 3:

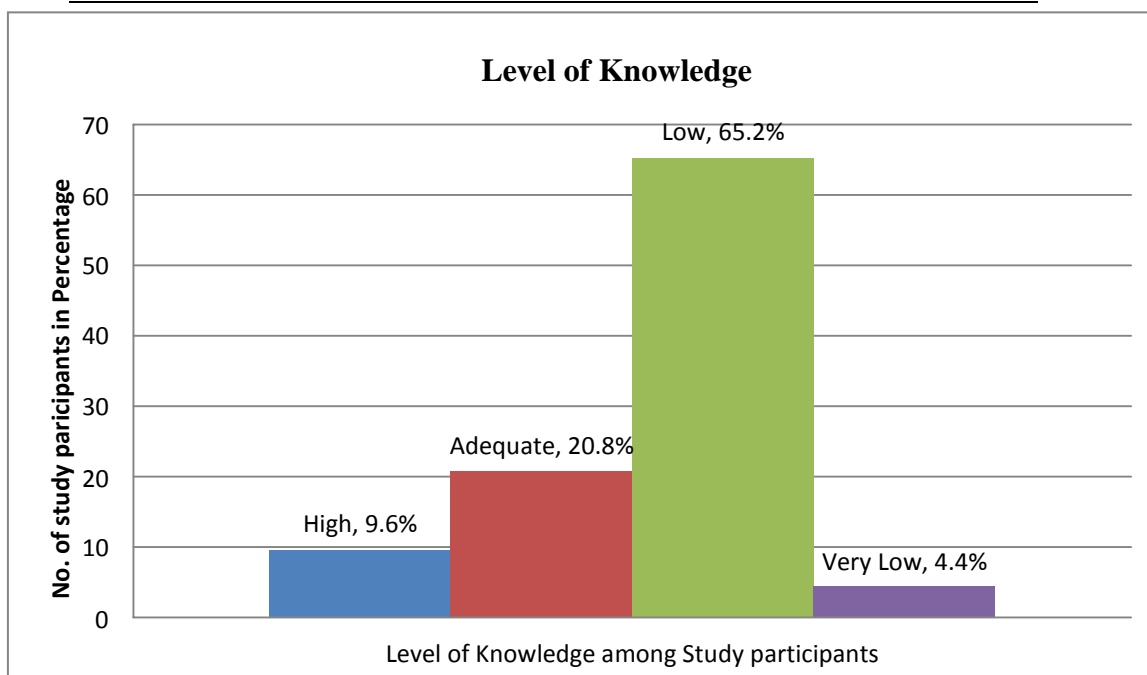
S.No.	Questions on acceptance of vasectomy	Yes (%)
1	Would you prefer Vasectomy over female sterilisation if you and wife seek a permanent method of contraception?	29 (11.6%)
2	Have you undergone vasectomy?	2 (0.8%)
3	Do you want to undergo vasectomy after having 2 children?	63 (25.2%)

III. Results:

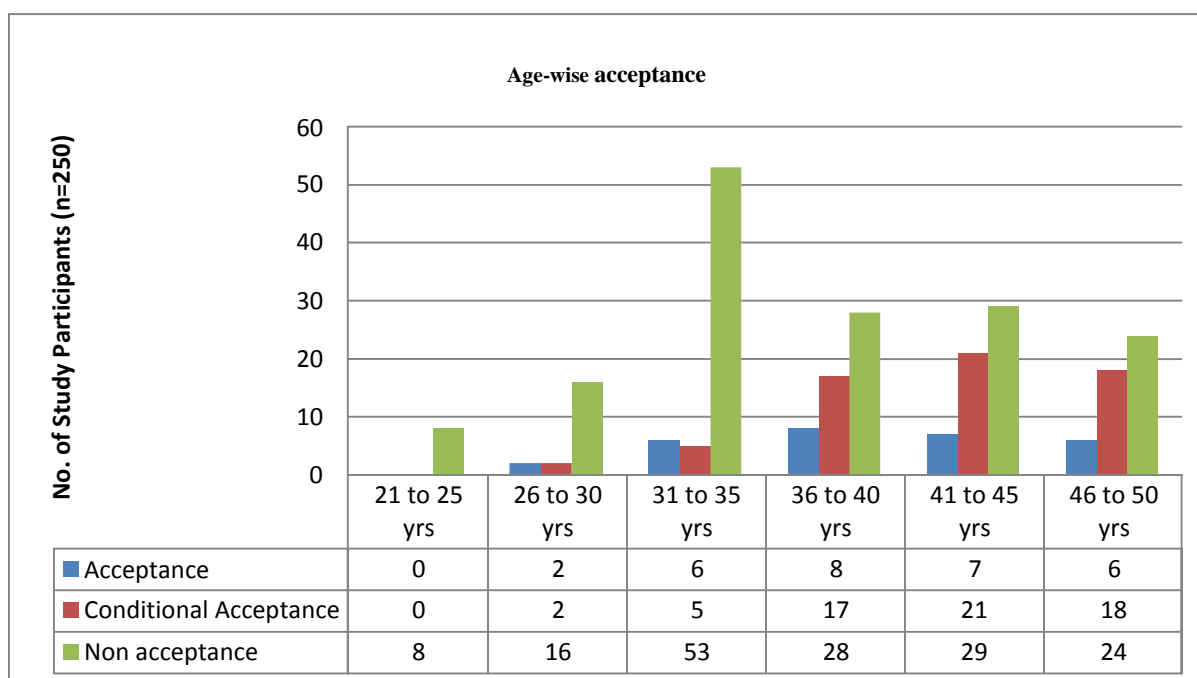
Out of total 250 study subjects who were interviewed after taking consent, 102 (41%) were Hindus, 43(17%) were Muslims, 18 (7%) were Christians, 45 (18%) were Buddhists and 42(17%) belonged to other religions. Amongst all study subjects, 8(3%) belonged to age group 21-25, 20(8%) belonged to age group 26-30 , 64(26%) belonged to age group 31-35 , 53 (21%)belonged to age group 36-40, 57(23%)belonged to age group 41-45 and 48 (19%)belonged to age group 46-50. Out of 250 married men under study, majority of study subjects 132 (52.8%) were educated more than High school and 168 (67.2%) were working. Most of the study subjects (91%) were using condom as their method of contraception. Only 2 amongst the study subjects underwent vasectomy before few years after completion of their family. Out of total 250 married males interviewed after taking consent, 9.6 % were having high level of knowledge, 20.8% were found to have adequate level of knowledge, 65.2% were having low level of knowledge and 4.4% were having very low level of knowledge. Out of 250 participants, only 29(11.6%) were interested in undergoing vasectomy, 63(25.2%) agreed for vasectomy conditionally and 158(63.2%) study subjects denied for undergoing vasectomy after completion of their family.

Table 2 Distribution of the level of knowledge on vasectomy in the study sample

Level of knowledge	Frequency	(%)
High	24	9.6
Adequate	52	20.8
Low	163	65.2
Very low	11	4.4
Total	250	100



Degree of acceptance of vasectomy as a male contraceptive	Frequency	Percentage
Acceptance	29	11.6
Conditional acceptance	63	25.2
Non acceptance	158	63.2



characteristic	Level of acceptance of vasectomy as a male contraceptive		
	acceptance	conditional	Non acceptance
Age(P < 0.05)			
21 to 25	0	0	8
26 to 30	2	2	16
31 to 35	6	5	53
36 to 40	8	17	28
41 to 45	7	21	29
46 to 50	6	18	24
Religion(P < 0.05)			
Hindu	13	18	65
Muslim	0	0	44
Christian	4	8	1
Buddhist	11	13	29
Others	3	14	27
knowledge(P < 0.05)			
High	4	6	10
Adequate	13	30	12
Low	13	14	133
Very low	1	3	11

IV. Discussion:

No study participant between 21 to 25 years age accepted vasectomy as his preferred contraception method. On religious belief, none of the Muslim study participants accepted vasectomy as a contraception method. Almost 92.3 percent of Christians accepted vasectomy as their preferred method of contraception.

V. Conclusion:

Out of total 250 married males interviewed after taking consent, 9.6 % were having high level of knowledge, 20.8% were found to have adequate level of knowledge, 65.2% were having low level of knowledge and 4.4% were having very low level of knowledge. 36.8 percent of married males under study were willing to undergo vasectomy after completion of their family out of which 11.6% were interested in undergoing vasectomy unconditionally and 25.2 agreed for vasectomy conditionally which indicates married males in

Amroha have low acceptance for vasectomy as a contraceptive method. 30.4% percent of married males under study were having high and adequate knowledge of vasectomy. 69.6% percent were found to have low and very low knowledge about vasectomy which indicates lack of proper awareness among married males about vasectomy, a well known contraceptive method. The present study provides valuable information regarding acceptance of vasectomy among men, when difficulties related to men's talking about family planning methods are taken into consideration.

Limitations of Study: The current study should be interpreted in light of some limitations. This is due to the study area being just a field practice area of a tertiary care hospital in Amroha and hence results of this study cannot be generalized to the entire population. Future studies could include a larger, randomized sample from a wide geographic area which may lead to better idea of knowledge and acceptance of vasectomy as a method of Contraception among men in India.

Recommendations: Married males should be given appropriate knowledge and awareness of the benefits of undergoing vasectomy after completion of their family. False beliefs and myths regarding vasectomy observed among study participants should be removed by proper timely counseling by expert doctors and health workers.

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