



## KNOWLEDGE AND APPREHENSIONS OF MALES TOWARDS NON SCALPEL VASECTOMY :A HOSPITAL BASED STUDY

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**ABSTRACT** **Background :** Non-scalpel vasectomy(NSV) is a highly efficient modern method of family planning, involving a small puncture, without incision or stitches. It is a safe and easy method of contraception, with minimal surgical risk .Despite its safety and promise, NSV has failed to achieve its goals.  
**Methodology :** The present cross sectional study was carried at Urban Health Training Centre, Community Medicine Department ,Government Medical College , Chandigarh, India. Couples who presented to the centre for family planning counseling during celebration of world population Day 2016 were included in the study  
**Aim: 1.** To assess the knowledge and apprehensions of the male population regarding NSV & their preferred family planning choices.  
**Results** 50% of the males were unaware about the fact that NSV is performed with out incision and can be done in single visit only . Only 1/3rd males were in favour of permanent sterilization once their family is complete .Maximum males (65.7% ) were in favour of tubectomy as compared to vasectomy (26.9%).  
**Conclusion :** Misconceptions about NSV are major barrier in increasing participation of males in family planning .Sustained efforts required to bridge the gap between male and female sterilization.

**KEYWORDS :** Non Scalpel Vasectomy , Contraception , Tubectomy, Sterilization

### INTRODUCTION

India, the largest democratic republic in the world, posses 2.4% of world's land area & supports 17.5 % of world's population , adds 16 million people to its large base of population each year.<sup>1</sup>Thus need for population stabilization has increasingly become indispensable as population beyond the sustainable limit perpetuate poverty, child labour, school drop-outs, malnutrition, Infant & maternal mortality & morbidity, proliferation of slums and a host of communicable disease, besides creating a dangerous imbalance between resource, environment and population. Effective family planning services play a pivotal role in controlling population growth and reproductive health care.

No-scalpel vasectomy (NSV) is a highly efficient modern method of family planning for males involving a small puncture, without incision or stitches. It is a safe and easy method of contraception, with minimal surgical risk and no loss of libido or sexual function. It was introduced in 1974 by Dr. Li Shunqiang of China, to improve the acceptance of vasectomy as a method of permanent sterilization.<sup>2</sup>

NSV was launched by Indian government as national no-scalpel vasectomy project in 1998 in collaboration with the United Nations Population Fund (UNFPA) to promote male participation in contraception and arrest the declining trend in male sterilization.<sup>3</sup> Compared to other methods of permanent sterilization the NSV approach is less invasive, less painful, less expensive ,heals faster and has fewer complications.<sup>4</sup> Despite its safety and promise, NSV has failed to achieve its goals. Female sterilization continues to be the most preferred permanent sterilization method in India. Lack of knowledge, socio-cultural myths and taboos are a major deterrent to the acceptance of NSV.

According to the National Family Health Survey-3 (NFHS-3), in contrast to female sterilization in India which has been adopted by 37.3% of couples practicing contraception, only 1% of the couples opt for male sterilization. The current acceptance of NSV in India has declined from 1.9% to 1% in NFHS-3.<sup>5</sup> The proportion of vasectomies stands at 4.4% with 95.6% of total sterilizations being tubectomies. Overall, sterilizations have seen a declining trend in India over recent years, from 5.1 million in 2010 to 4.5 million in 2013, with a major decline in Chandigarh and neighbouring states of Punjab, Haryana, Delhi and Himachal Pradesh.<sup>6</sup>

In India, family planning is considered to be the woman's

responsibility and thus tubal ligation is much more popular compared to vasectomy. The need of the hour is to understand the level of knowledge and attitudes of men toward family planning and make them more responsible toward meeting their reproductive goals. Keeping this view in mind, the present study was planned to highlight the knowledge and apprehensions of the male population regarding NSV, and to know their preferred family planning practices .

#### Aims and objectives –

1. To study the socio demographic profile of the couple coming for family planning counseling
2. To assess the knowledge & apprehensions of males towards non scalpel vasectomy and their attitude towards family planning.

#### Material and methods –

**Study Setting :** The present cross sectional study was carried at Urban Health Training Centre(UHTC), Department of Community Medicine, Government Medical College, Chandigarh, India.

#### Study period - June-July 2016

**Methodology :** The study was conducted during celebration of world population day 2016 .Two additional fortnights were observed around the 11<sup>th</sup> July. The first fortnight (27th June to 10th July) was known as “Dampati Sampark Pakhwada” or Mobilization Fortnight. Second Fortnight (11<sup>th</sup> -24<sup>th</sup> July) was known as “Jansankhya Sthirta Pakhwada” or Population Stabilization Fortnight wherein intensified service provision activities organized at all facilities across the State. Family planning counseling was also undertaken in an intensified manner over these two fortnights. All the married couples in which female partner was in reproductive age group, who presented to the centre for various reasons were counseled for family planning with special emphasis on NSV.

#### Inclusion criteria :

- 1.Married males giving consent for the study .
- 2.Couples having atleast one child

#### Exclusion criteria :

1. Couples with no child
2. Not giving consent for the study

**Data collection :** Interview of the males was conducted on individual basis by the trained medical social workers. Purpose of the study was

explained to the participants and informed verbal consent was taken. The information was collected regarding socio-demographic profile, knowledge regarding non scalpel vasectomy and preferred family planning method

**Statistical analysis:**

The data was entered in Microsoft Office Excel 2007. Statistical analysis was done using SPSS version 22. Descriptive statistical analysis was represented through frequency and percentages.

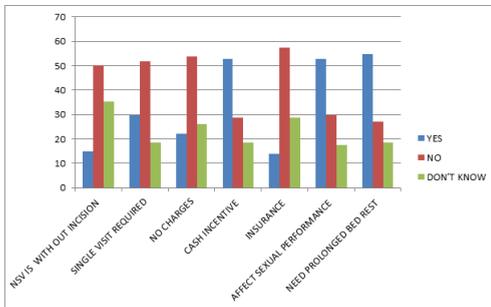
**Results :**

**Table 1 : Socio demographic profile of study participants**

Demographic variable		No.(n=118)	%
Age group (yrs)	20-30	32	27.1
	31-40	72	61
	>40	14	11.9
Religion	Hindu	90	76.3
	Muslim	9	7.6
	Sikh	19	16.1
Occupation	Unskilled worker	36	30.5
	Semiskilled worker	29	24.5
	Skilled	25	21.2
	Shop owner /clerk	10	8.5
	Semi professional & Professional	18	15.3
Educational status	Illiterate	6	5.1
	Upto high school	65	55.1
	Intermediate	18	15.2
	Graduate & above	29	24.6
Residence	Urban	46	39
	Rural	34	28.8
	Urban slums	38	32.2
Socio economic status*	I(Upper)	11	9.3
	II(Upper Middle )	42	35.6
	III(Lower Middle )	37	31.4
	IV (Upper Lower)	20	16.9
	V(lower )	8	6.8

In the present study total 118 males were interviewed with range 24-45 yrs. Mean age of participants was 30.5 years. Majority of participants (84.3%) were Hindu by religion. Most of the males (31.5%) were unskilled workers and 39.8% participants belonged to urban area.

**Figure 1: Knowledge of males regarding various aspects of Non scalpel Vasectomy**



Among all the respondents, 108 (91.5%) males had ever heard of NSV. Out of those only 16 (14.8%) were aware that NSV is done without any incision 32 (29.6%) were aware about the fact that NSV can be performed in single visit only. Although 57 (52.8%) knew that cash incentive is given for undergoing vasectomy, very few 15 males (13.9%) were aware about the fact that there is insurance of pregnancy or any other complication which occur after vasectomy. 53% males still believe that vasectomy affects sexual performance and prolonged bed rest is required after the procedure. (Figure 1)

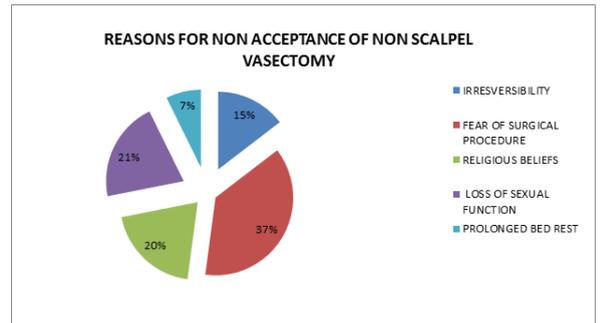
**Table 2: Attitude of males towards family planning**

Question	Options	No. (n=118)	%
Who is responsible of family planning	Husband	16	13.6
	Wife	62	52.5
	Both	40	33.9

Should couples go for permanent sterilization after completing their families over other methods of contraception	Yes	36	30.5
	No	71	60.2
	No response	11	9.3
What would be your preferred method of permanent sterilization	Tubectomy	77	65.2
	Vasectomy	33	28
	No response	8	6.8
Are you willing to adopt NSV as a method of contraception	Yes	12	10.2
	No	99	83.9
	No response	7	5.9

About 50% males believe that family planning is the sole responsibility of females. Only 1/3rd (30.6%) males were in favour of permanent sterilization once their family is complete. Maximum males (65.7%) were in favour of tubectomy as compared to vasectomy (28%). In the present study only 10.2% were willing to adopt vasectomy as method of contraception (Table 3)

**FIGURE 2 : Reasons for non acceptance of non scalpel vasectomy**



Most common reason reported by participants for refraining from NSV was the fear of surgical procedure (37.5%). Other reasons reported by males for not accepting NSV was loss of sexual function (20.8%), religious beliefs (19.8%), irreversibility of the procedure (14.6%)

**Table 4: Preferred choice of family planning methods by males**

Condom	29	24.6
Cu t	40	33.9
OCPs	17	14.4
Tubectomy	18	15.2
Vasectomy	8	6.8
Injectable contraceptive	6	5.1

When asked about preferred method of contraception majority of males were in favour of spacing method. 29 (24.6%) males were in favour of using condoms. 40 (33.9%) males preferred CUT and 17 (14.4%) males wanted oral contraceptive usage by their partner.

**Discussion**

In the present study knowledge about various aspects of NSV is poor among males. Although 52.8% were aware that cash incentive is given for undergoing vasectomy, very few males (13.9%) knew about provision of insurance of pregnancy or any other complication which occur after vasectomy. More than half of the participants were unaware that NSV is done without any incision and can be performed in single visit only. In contrast to our results, in a study conducted in Delhi, majority of participants (97.2%) knew that NSV is done without any charge and cash incentive is given to the NSV client after the procedure. In spite of various IEC activities misconceptions are deeply rooted in minds of people regarding NSV. In our study about 50% males still believe that NSV affects sexual function and prolonged bed rest is required after procedure.

In our study Television (62%) and newspaper (31.5%) was reported as the most common source of information about NSV. A study conducted in Hyderabad found that health worker (42%) followed by mass media (32%) were the commonest source of information. Contrary to our results S kumar et al noted friends or relatives as a main source of information and a significant percentage of them were motivated by satisfied acceptors (47.32%). There is a significant role of health workers to motivate people regarding vasectomy and removing their mis-conception regarding it.

In the current study 50% males believe that family planning is the sole responsibility of males. This is also reflected in their choice of contraception 47.4 % males want that female partner should use any method of family planning. 33.3% preferred CU-T while 14.4% preferred OCP use by their partners. Similar attitude of males was also seen in another study<sup>10</sup> where most of the study subjects were not curious to know more about non-scalpel vasectomy, as they strongly believed that family planning is a responsibility of the females.

Among permanent sterilization most of the respondents preferred tubectomy as compared to vasectomy. Only 10.2% males were willing to accept vasectomy as contraception in near future. In a study done by Pankaj et al<sup>7</sup> 34.1% respondents were willing to adopt NSV as a method of family planning. A study conducted in Mumbai<sup>11</sup>, found that maximum respondents were having knowledge of Tubectomy out of this 42.22% couples have undergone Tubectomy and none of them got vasectomy done. Anjana Vaidyanathan et al<sup>10</sup> in their study in Tamilnadu found that most preferred method of contraception in both urban and rural areas was permanent method of contraception i.e Female Sterilization.

In the present study most common reason for non acceptance of NSV was fear of surgical procedure (37.5%). 20.8% participants don't want to undergo permanent sterilization due to belief that it could affect sexual function. Similar reasons were also noted by Pankaj et al<sup>7</sup>. The major reason stated in other studies<sup>12,13,14</sup> were the belief among men and women that vasectomy will lead to loss of libido, sexual power and may cause weakness to the men.

The primary reason cited by men (53%) for not undergoing vasectomy, in a study conducted in Mohali<sup>15</sup>, was that tubectomy was a simpler procedure therefore their partners should undergo sterilization instead. 52% feared failure of the procedure and the bad name it would bring to the family; if partner gets pregnant. This indicates that men have incomplete knowledge about vasectomy which acts as barriers in accepting permanent sterilization.

**Conclusion :** Misconceptions about NSV are major barrier in increasing participation of males in family planning. Satisfied NSV acceptors can be instrumental in removing misconceptions. Role of health workers should be increased in spreading awareness about vasectomy. Along with female partner, males should also be counseled for family planning so that apprehensions of the couple can be tackled simultaneously. Sustained efforts are required to bridge the gap between male and female sterilization.

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