

## ORIGINAL ARTICLE

## SOCIODEMOGRAPHIC AND REPRODUCTIVE FACTORS AFFECTING KNOWLEDGE OF MARRIED MEN ACCEPTING VASECTOMY

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**Background:** Men's attitude is very important in the adoption of methods of contraception and limiting the family size. Men represent half the world's population, but account for less than one-third of contraceptive use. Knowledge of men about vasectomy as contraceptive method is also limited. The objectives of the study were to assess the knowledge of males about vasectomy in age group 25–50 years and to identify the factors affecting the knowledge of men regarding vasectomy. **Methods:** It was cross-sectional descriptive study. All the clients coming for vasectomy at Lahore General Hospital and Family Health Hospital were included in the study. Data was collected through questionnaire, which was entered in to computer using SPSS-17. Confidentiality of the data was ensured and verbal consent was obtained before data collection. **Results:** Majority (85.6%) of the men had adequate knowledge about vasectomy. Major source of knowledge, motivation and decision making regarding vasectomy were healthcare providers followed by friends and colleagues. Socio-demographic factors like age of the wife, education of men, income of men, media, friends and relatives showed association with knowledge about vasectomy. **Conclusions:** Almost all the respondents had formal education. Majority of the respondents had knowledge about vasectomy. Respondents acquired knowledge from health personnel, television, radio, newspapers, spouses and friends/colleagues. Misconception of the general population regarding vasectomy needs to be cleared and men should be involved actively in family planning programs. Health education program should be held at community level to educate people about the utilization of procedure.

**Keywords:** Married male, vasectomy, factors, knowledge

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### INTRODUCTION

Rapidly increasing population is a major issue for many countries of the world. The world population is growing at an annual rate of 1.2%. Population in Pakistan has multiplied rapidly in the last few decades. Pakistan with a population of 184.35 million is the sixth most populous country in the world. With present growth rate of 1.8 percent Pakistan will be the fifth most populous country in 2050. High population growth is an important factor for rapid resource depletion and environmental degradation thus leading to economic backwardness. It is a serious challenge and hence needs to be addressed through family planning (FP) information and services. Family planning promotion is the priority for the government of Pakistan in order to keep pace between socioeconomic growth and population expansion.<sup>1-4</sup>

Little is known about men's role in the adoption of family planning methods. Males have often been neglected in family planning program. Men's attitude is very important in the adoption of contraceptive methods and also in limiting the family size.<sup>5,6</sup> Men represent half the world's population, but account for less than one-third of contraceptive use. Contraceptive methods for males are very limited<sup>7</sup>. In Pakistan like other developing countries most family

planning programs targeted women. Men are known to not participate in reproductive health issues. Studies revealed that men have poor knowledge about family planning methods especially vasectomy.<sup>8,9</sup>

Vasectomy is a simple and less expensive permanent method of contraception. It is one of the least popular, least known and used methods, throughout the world.<sup>10,11</sup> Pakistan's population is expanding rapidly and contraceptive methods focused on women alone cannot stop this rapid growth. Involvement and use of family planning methods by men is important because of their dominant role in family's decision making in social and cultural context of Pakistan.<sup>12</sup>

Men's knowledge regarding different contraceptives is very important for their motivation to accept that method.<sup>13</sup> Vasectomy is a safe, cost effective and permanent method of contraception, but there are many factors that play a role in its relative lack of acceptance, such as socio-demographic & economic factors, low social support, and inaccurate knowledge and belief about vasectomy.<sup>14,15</sup> The present study helps to investigate the knowledge and factors responsible for accepting vasectomy among the married men attending vasectomy centres in Lahore.

## MATERIAL AND METHODS

It was cross-sectional study conducted at two hospitals of Lahore: public sector (Lahore General Hospital) and a private hospital. Vasectomy centres at both the hospitals perform vasectomies two days a week. Client turnover is approximately 5–10 clients on each day.

Married men (25–50 years) visiting the vasectomy centres constituted the study population. There are five hospitals in Lahore where vasectomy services are provided. Out of which 4 are public hospitals and one is private hospital. One public and the lone private hospital were selected. All the clients visiting these hospitals for vasectomy during the study period were included in the study. The sample size of the study was 70 clients selected through purposive sampling technique. Men less than 20 years of age, unmarried and those who had undergone surgical procedure in inguinal region were excluded. Data was collected over a period of one month. A semi-structured questionnaire was prepared and finalized after pre-testing. Married males were interviewed and responses were noted on the questionnaire. Interviews were done in local language. Data was analysed using SPSS-17.0. Verbal consent was taken from respondents. Privacy and confidentiality was maintained. Table-1 gives account of sample's socio-demographics. Results show that 43 (61%) respondents were between 30–40 years of age. Table-2 shows that majority (85.7%) men had adequate knowledge with source of information of vasectomy was predominantly from health personnel followed by friends. Age of wife was associated with knowledge of vasectomy ( $p=0.038$ ) whereas duration of married life and number of children had no such association. Table-3 shows results of factors affecting knowledge of men about vasectomy. Significant association was noted between the education of men, income of men, media as a source of knowledge of vasectomy, friends/colleagues as source of motivation for

vasectomy and relatives/friends as source of decision making for vasectomy and knowledge of men regarding vasectomy.

## RESULTS

Results show 43 (61%) respondents were between 30–40 years while 27(38%) were more than 40 years of age. Almost all were educated however 52 (74%) had college level education. Sixty-four (91.4%) of the respondents were working with private sector. Twenty-four (30%) had monthly income less than 20,000 and 49 (70%) earning more than 20,000. Sixty-two (88.6%) of respondent's wives were more than 30 years old, about 42(60%) had more than 16 years of marriage and 55 (79%) had more than 3 children.

Table-2 shows majority 85.7% men had adequate knowledge about vasectomy whereas 14.3% men had inadequate knowledge. Source of information of vasectomy for majority of men 64 (91.4%) was predominantly Health personnel followed by friends in 46 (65.7%) and media in 30 (41.8%). Regarding motivation for vasectomy Health care provider motivated 67 (95.7%) men and friends 46 (65.7%). Health care providers helped 68 (97%) men in decision making for vasectomy and 29 (41.2%) were helped by friends. Table-3 reflects that duration of married life and number of children had no significant effect on the knowledge of men regarding vasectomy however age of wife showed significant effect on the knowledge.

Table-4 results show significant association between the education of men, income of men, media as a source of knowledge of vasectomy, friends/colleagues as source of motivation for vasectomy and relatives/friends as source of decision making for vasectomy and knowledge of men regarding vasectomy. There is no association seen between health care providers as a source of information, source of motivation and decision making regarding vasectomy and knowledge of men.

**Table-1: Sociodemographic characteristics of the respondents**

Variable	Frequency	Percentage
<b>Age of respondents</b>		
30–40 Years	43	61.5
>40 Years	27	38.5%
<b>Education</b>		
Illiterate	1	1.4
Matriculation and below	17	24.3
Above matriculation	52	74.3
<b>Occupation</b>		
Government sector	6	8.5
Private Sector	64	91.5
<b>Monthly income</b>		
Less than 20,000	21	30
More than 20,000	49	70
<b>Age of wife</b>		
Less than 30 years	8	11.4
More than 30 years	62	88.6
<b>Duration of marriage</b>		
Less than 16 years	28	40
More than 16 years	42	60
<b>Number of children</b>		
Less than an equal 3	15	21.4
More than 3	55	78.6

**Table-2: Knowledge about vasectomy, source of knowledge, motivation and decision making regarding vasectomy**

	Frequency	Percentage
<b>Knowledge about vasectomy</b>		
Adequate	60	85.7
Inadequate	10	14.3
<b>Source of knowledge about vasectomy</b>		
Health personnel	64	91.4
Friends	36	51.4%
Media (radio, T.V, newspaper)	30	41.8
Spouse	3	4.2
<b>Source of motivation about vasectomy</b>		
Health care Provider	67	95.7
Friends/colleagues	46	65.7
Wife /relatives	3	4.2
<b>Source of decision making for vasectomy</b>		
Health care provider/friends	68	97.1
Friends/health care providers	29	41.2
Spouse	2	2.9

**Table-3: Factors affecting knowledge of men**

Variable		Knowledge		Total	p-value
		Below Average	Average & Above		
Education of men	Up to Matriculation	8	10	18	0.000*
	Above Matriculation	2	50	52	
Income of men	Up to PKR 20,0000	10	11	21	0.000*
	About PKR 20,0000	0	49	49	
<b>Source of knowledge about vasectomy</b>					
Health care provider	1	7	57	64	0.89
	2	0	1	1	
MEDIA(TV/Radio, newspaper, magazine)	1	0	30	30	0.013*
	2	7	28	35	
<b>Source of motivation for vasectomy</b>					
Friend/Colleague	1	2	44	46	0.002*
	2	8	16	24	
<b>Source of decision making for vasectomy</b>					
Health care provider	1	9	59	68	0.267
	2	1	1	2	
Relatives/friends	1	1	28	29	0.038*
	2	9	32	41	

\*Statistically significant at 5% level

## DISCUSSION

Vasectomy is a male sterilization technique. In the sphere of family planning, vasectomy is often ignored, despite being the safest, simplest, highly effective and least expensive contraceptive method. Worldwide 3–6% of couples are using vasectomy as method of contraception.<sup>14–16</sup> Pakistan with a growth rate of 1.8% is the sixth most populous country of the world; its contraceptive prevalence rate of 35% is posing huge challenges on the family planning program in Pakistan. Studies have shown that there is more emphasis on female sterilization than male sterilization.<sup>17</sup>

The majority (61.5%) of the participants were between the ages of 31–40 and 74% had college/university education. This correlates with the findings of Owopetu *et al.*<sup>2,18</sup> Majority (70%) had monthly income more than 20,000, 78% had more than 3 children; duration of marriage was more than 16 years in 60% men. These findings were similar to studies done in Africa, Iran and India.<sup>9,18,19</sup>

The result of this study revealed that majority (85.7%) of men had adequate knowledge about vasectomy but results of the study done by Akpamu *et al* showed that majority of men had inadequate knowledge, this difference may be due to the fact that only those men were included in this study that came to vasectomy centres for vasectomy.<sup>21</sup> In this study healthcare providers were the main source of information, motivation and decision making regarding vasectomy.

Another important finding of this study was that participants' educational qualifications had significant association with the level of knowledge of vasectomy. Men with college/university education had better knowledge. Studies done by Soaji *et al* and Keramat *et al* also showed the same findings.<sup>10,22</sup> Finding in the present study are supported by the fact that educated men are more exposed to media so have better knowledge. Media as source of information about vasectomy showed significant association with the level of knowledge of vasectomy. Another

finding of the study was that men with better income had better knowledge and there is an association between the two variables. This can be explained that men with better income had better exposure to (education, facilities and media). This knowledge has significant association with the age of wife, education and salary of men, media as a source of information, friends/colleagues as source of motivation and relatives and friends as source of decision making for vasectomy.

This study also identified an indirect spousal support in the form of duration of marriage and age of the wife on the acceptance of vasectomy, which is synonymous with the findings from the study done by Bounce *et al.*<sup>22</sup> There is need to educate women about the vasectomy so they can support and motivate their husbands and partners to accept this method. Specific measures should be taken to identify barriers and remove misconceptions about vasectomy.

## CONCLUSIONS

Almost all the respondents had formal education. Majority of the respondents had knowledge about vasectomy. Respondents acquired knowledge from health personnel, television, radio, newspapers, spouses and friends/colleagues. Misconception of the general population regarding vasectomy needs to be cleared and men should be involved actively in family planning programs. Health education program should be held at community level to educate people about the utilization of procedure.

## AUTHOR'S CONTRIBUTION

All authors contributed equally.

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