

Opinions and Attitudes About Vasectomy of Married Couples Living in Turkey

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Sezer Kısa, MSN, PhD¹, Esen Savaş, MD²,
Simge Zeyneloğlu, MSN, PhD², and Sevgül Dönmez, MSN, PhD²

Abstract

This study was conducted as a descriptive study, designed to determine the opinions and attitudes of married couples living in Turkey about vasectomy. The sample consisted of 350 women. Researchers used a questionnaire to collect data. Descriptive statistics and chi-square analysis were used. The results showed that 14% of women and 43.0% of men were of the opinion that undergoing a vasectomy procedure was a sin. Chi-square analysis determined statistically significant differences between the male and female groups ($p < .05$). More than 88.0% of the men were not willing to have vasectomy and 35.4% thought that vasectomy had a negative effect on marriage and sexual health. In addition, 58.9% thought that vasectomy had a negative effect on men's health. Women were more likely than men to see vasectomy as merely a cultural taboo instead of a sin. Sociocultural factors, such as ideas that contraception is the woman's responsibility, that sterilized men lose status in society, or that sterilized men lose authority in the family, as well as misconceptions about vasectomy such as concerns about sexual functioning, psychological effects, and effects on physical strength, were determined to be the main barriers for vasectomy use in Turkish culture. The study recommends determining strategies for overcoming sociocultural barriers by raising awareness and increasing the utilization of vasectomy. Couple-specific family planning programs can make an important contribution toward improving awareness of the benefits of vasectomy.

Keywords

culture, family planning, men, vasectomy use, women

Introduction

The 1994 Conference on Population and Development in Cairo highlighted the need for men's involvement in sexual and reproductive health issues (de Irala, Osorio, Carlos, & Lopez-del Burgo, 2011). One of the most important indicators of reproductive health is effective family planning (FP). Most FP methods often focus exclusively on women, with the objectives of preventing frequent births and reducing maternal and fetal death. Women have had a more prevalent role in FP services, specifically with regard to research and information campaigns related to contraception (Onasoga, Edoni, & Ekanem, 2013). Men also play a very important role in deciding the number of children couples have and how to use FP methods most effectively (de Irala et al., 2011). International health organizations in recent years have suggested emphasizing the importance of men's participation in the promotion and use of contraceptive methods (Murdoch & Goldberg, 2014; UNFPA, 2012). In developing countries like Turkey, the rate of men's participation in FP is still too low (de Irala et al., 2011; Ijadunola et al., 2010; Tuloro, Deressa, Ali, & Davey, 2006). Statistically, in

Turkey, the withdrawal method (26.0%) is most common among men with condom use in second place (15.8%; Turkey's Demographic and Health Survey [TDHS], 2013).

One of the most important ways to encourage men to use FP is to provide couples with more male-oriented contraceptive choices, such as vasectomy (Bunce et al., 2007). Although vasectomy is a simple process with a high success rate (>99%) and minimal complications (such as swelling and pain), it is still underutilized around the world, especially in developing countries (Cook, Van Vliet, Lopez, Pun, & Gallo, 2014; Mohamad Al-Ali et al., 2014; Rayala & Viera, 2013; Shang et al., 2015). The worldwide rate of vasectomy use is reported at 3%, with a rate of 2% in developed countries (United States Agency

¹Oslo and Akershus University College of Applied Sciences, Kjeller, Norway

²Gaziantep University, Gaziantep, Turkey

Corresponding Author:

Simge Zeyneloğlu, Faculty of Health Sciences, Department of Nursing, Gaziantep University, Şahinbey, Gaziantep 27310, Turkey.
Email: simge@gantep.edu.tr

for International Development [USAID], 2013). Canada (22%), China (21%), the United Kingdom (21%), South Korea (16.8%), the United States (12.7%), and Australia (9.3%) have the highest usage rates. Developing countries such as India (0.1%), the Philippines (0.1%), Ghana (0.0%), and Cuba (0.1) have a very low rate of vasectomy use (Ezegwui & Enwereji, 2009; Scott, Alam, & Raman, 2011; United Nations, 2011; USAID, 2013). Although the rate of vasectomy use is low in most developing countries, it is especially low in Turkey, where it rarely exceeds 0.1%, and in the last 20 years no increase was observed (TDHS, 2013). Especially in male-dominated societies, like Turkey, culture and community aspects influence the ability and willingness of men to use vasectomy as a contraceptive method. The use of vasectomy is thought to be discouraged by fears of castration, loss of erectile function, loss of libido, and by sociocultural factors such as the risk of sexual disability after vasectomy and a sense of degradation (Ezegwui & Enwereji, 2009; İzol, Değer, & Aridoğan, 2013; Mohamad Al-Ali et al., 2014; Owusu-Asubonteng, Dassah, Odoi, Frimpong, & Ankobea, 2012).

According to research, factors affecting vasectomy use include the number of children in the family (Altay & Gonener, 2009; Anderson et al., 2010; Dahal, Padmadas, & Hinde, 2008; Eisenberg, Henderson, Amory, Smith, & Walsh, 2009; Shrestha, Kayastha, Manandhar, & Chawla, 2014), age, duration of marriage (Eisenberg et al., 2009), partner's choice (Bunce et al., 2007), medical reasons (Anish, Sreelakshmi, Akhila, Anandu, & Afsar, 2013), economic status (Bunce et al., 2007; Dassow & Bennett, 2006; Shrestha et al., 2014), region, ethnicity (Anderson et al., 2010; Anderson et al., 2012; Bunce et al., 2007; Dassow & Bennett, 2006; Eisenberg et al., 2009; Whitea & Potterb, 2014), reputation and availability of providers, religious and cultural beliefs, future uncertainty, fear, false and incomplete information (Anish et al., 2013; Bunce et al., 2007; Christiana, Sonachi, & Chinomso, 2014; Ebeigbe, Igberase, & Eigbefoh, 2011; Mohamad Al-Ali et al., 2014; Nian, Xiaozhang, Xiaofang, Qing, & Minxiang, 2010; Scott et al., 2011; Sood & Pahwa, 2014), dissatisfaction with and failure of other contraceptive methods (Anderson et al., 2010), education level (Anderson et al., 2010; Chang et al., 2015; Shrestha et al., 2014), and psychological reasons (Ebeigbe et al., 2011).

According to TDHS, the overall fertility rate in Turkey is 2.26 children per woman. This rate is highest in the eastern region (3.41 children per woman; TDHS, 2013). Married women at reproductive age who have children in particular want to restrict their number of children by using FP methods. However, significant differences in the prevalence of methods of contraception resulting from demographic considerations, such as the education level of women and cultural differences stemming from

geography, region, and settlement type, have led to ineffective use or wrong selection of the FP methods.

Although vasectomy is effective, simple, permanent, and has a low risk of complications, its low utilization rate has led researchers to examine the sociocultural factors that may be influencing the decision not to use vasectomy. According to Hosseini and Abdi (2012), experiences and sociocultural consequences inform the social beliefs and opinions of individuals; therefore, providers should strive to understand the feelings and needs of vasectomized clients to encourage vasectomy use in society. Turkey has a limited number of studies on the use of vasectomy, and they are focused on men rather than couples. This study aimed to identify factors affecting the decision among couples in Turkey to undergo vasectomy and presents evidence that understanding the influence of sociocultural factors on the use of vasectomy will be effective in guiding the FP efforts of medical staff and policy makers.

Method

Descriptive statistics were used to determine the opinions and attitudes of married couples living in Turkey about vasectomy and barriers to vasectomy use. Respondents were drawn from a convenient sample of 350 married couples recruited from the postpartum clinic of a women's hospital in Gaziantep, Turkey. The data were collected between May and December 2014. The hospital is the region's largest women's hospital, with 188 beds. It delivers a full range of secondary care services (inpatient and outpatient). Most of the hospital's services focus on women and infants. The inpatient postpartum clinic accepts 40 to 60 women per day. The inclusion criteria for the study were as follows: couples, voluntary participants, literate, fertile or not menopausal, and having at least one child. Infertile or menopausal couples were not included in this study. The study was conducted at random time intervals on weekdays. The study's findings include all responses recorded during the research period from couples who were eligible for the study.

The data were collected using a questionnaire that had been prepared in accordance with information collected from literature in the field (Altay & Gonener, 2009; Anderson et al., 2010; Dahal et al., 2008; Eisenberg et al., 2009; Odu, Jadunola, & Parakoyi, 2005; TDHS, 2013; Tuloro et al., 2006). The questionnaire consisted of 48 questions related to socioeconomic and demographic information (age, educational level, marital status, employment status, income status, etc.), fertility information, and the couple's FP history (number of living children, couple's respective ages at the time of marriage, marriage duration, number of children, children's genders, number of male children, practice of FP methods,

reasons for not using male methods, information about FP, sources of information, methods used, whose decision it was to use the methods in question, etc.). In addition, the vasectomy questionnaire included 16 propositions, which the couples were asked to respond to, such as the following: “Birth control method (vasectomy) is imposed by Western countries and is not suitable for Turkish men”; “Vasectomy results in loss of societal status for men”; “If a married couple does not want to have more children, it is the responsibility of men to use protection”; “Vasectomy has a negative psychological effect on men”; “Men with vasectomy lose their authority in the family”; “Use of vasectomy as a method of FP is not a correct practice”; “Having many children gives a man status in society”; and so on.

Five faculty members from nursing, sociology, and anthropology developed the questionnaires, reviewed them for content validity, made subsequent adjustments, and provided final approval. The final questionnaire was pilot tested with 15 couples who were not included in the main study. Based on the results, the researchers modified the questionnaire for comprehensibility and usability.

Couples who met the criteria and agreed to participate in the study met with researchers for 15 to 20 minutes in the postpartum inpatient clinic room of the sampled hospital. Prior to beginning the research, the institutional review board obtained approval from the hospital. Approval was also obtained from the provincial health authority before the data were gathered. Before conducting the research, the researchers explained to the subjects their rights as study participants and the purpose of the study. To protect the confidentiality of the subjects during the study, researchers asked the couples if they wanted to be part of the study and told participants that they had the right to terminate and withdraw from the study at any time. Researchers obtained verbal and written consent from all participants. Participation was completely voluntary and anonymous.

Statistical Analysis

The data were coded and entered into a database. Researchers used printed frequencies to check for outliers and to clean up the data. Then the data were exported to a software program, Statistical Package for the Social Sciences (SPSS), version 17.0, for analysis. The data were analyzed to calculate the frequency distribution of dependent and independent variables. Researchers employed the chi-square test to assess associations between the two dependent variables and the independent variables. The authors compared responses about the factors affecting the decision to use vasectomy, identifying the resulting p value of .05 as the significant level.

Results

A sociodemographic description of respondents was established, and 52.9% of the women and 46.0% of the men who participated in this study were between 30 and 39 years of age. Sixteen percent of the women and 35.2% of the men were high school graduates. Slightly higher than 24% of the men and 8.9% of the women reported having a sufficient income. The average number of children per couple was 2.51 ± 1.27 . Eighty-three percent of the participants stated they had had their children willingly. Approximately 60% did not want to have children again. Sixty percent of respondents stated that three children is the ideal number for a family. Chi-square analysis determined a statistically significant difference based on sociodemographic variables and gender ($p < .05$; see Table 1).

Statistical analysis was used to determine gender-based differences in respondents' views regarding FP and contraception generally. Regarding FP methods generally, 39.1% of women and 40.3% of men reported using FP methods, 60% of women and 28.2% of men stated that use of FP is a sin, and 14.3% of women and 43.0% of men reported their opinion that use of vasectomy is a sin. Finally, 24.0% of women and 51.4% of men reported receiving information about FP, but of those, only 16.7% of women and 39.4% of men reported receiving information from health care providers. Chi-square analysis determined a statistically significant difference between the groups ($p < .05$; see Table 2).

Participants' responses to questions about their knowledge of vasectomy generally revealed that 39.4% of women and 45.1% of men had heard of vasectomy before the survey; 49.4% of men did not know whether vasectomy was a safe contraceptive method or not; 28.3% of women and 19.6% of men viewed vasectomy as a difficult process; 84.1% of women and 44.9% of men stated that their negative views toward vasectomy were affected by environment; 10.1% of women and 35.4% of men believed vasectomy had a negative effect on marriage; and 3.6% of women and 35.4% of men believed vasectomy could negatively affect sexual health. The analysis also reveals that the education level of male participants has an impact on the status of having vasectomy. The male participants who had high school (39.9% or 63 men) and university education (37.3 or 59 men) were more aware of vasectomy and vasectomy-related issues compared with the participants who had less than high school education (22.8% or 36 men). Finally, 88.6% of the men were not willing to have vasectomy as an FP method. Chi-square analysis of reported opinions about vasectomy generally according to gender identified a statistically significant difference ($p < .05$; see Table 3).

Finally, participants' responses to sociocultural propositions about vasectomy revealed that 100% of women

Table 1. Distribution of Participants' Sociodemographic Variables According to Gender ($N = 700$; Gaziantep, Turkey, 2013).

Variables	Gender						χ^2	p
	Women		Men		Total			
	n	%	n	%	n	%		
Age group (years)								
19-29	165	47.1	103	29.4	268	38.3	1.020	.000*
30-39	185 ^a	52.9	161	46.0	346	49.4		
40 and older	0.0	0.0	86	24.6	86	12.3		
Educational level								
Illiterate	19	5.4	11	3.1	30	4.3	103.314	.000*
Literate	43	12.3	8	2.3	51	7.3		
Elementary	212 ^a	60.6	133	38.0	345	49.3		
High school	59	16.9	123	35.2	182	26.0		
University or higher	17	4.8	75	21.4	92	13.1		
Occupation								
Not working	261 ^a	74.6	9	2.6	270	38.6	405.195	.000*
Government worker	63	18.0	135	38.6	198	28.3		
Employee	26	7.4	145	41.4	171	24.4		
Self-employed	0.0	0.0	61	17.4	61	8.7		
Duration of marriage								
1-5 years	124 ^a	35.4	95	27.1	219	31.3	22.290	.000*
6-10 years	47	13.4	85	24.3	132	18.9		
11-15 years	110	31.4	80	22.9	190	27.1		
16 years or more	69	19.7	90	25.7	159	22.7		
Perception of income level								
Sufficient	31	8.9	86	24.6	117	16.7	38.132	.000*
Partially sufficient	108	30.9	118	33.7	226	32.3		
Not sufficient	211 ^a	60.3	146	41.7	357	51.0		
Living region								
Province	271 ^a	77.4	236	67.4	507	72.4	16.134	.000*
Town	65	18.6	73	20.9	138	19.7		
Village	14	4.0	41	11.7	55	7.9		

^aGroup forming the difference.

* $p < .05$.

and 29.7% of men agreed that vasectomy as a birth control method is imposed by Western countries and is not suitable for Turkish men. In addition, 100% of women and 35.4% of men agreed that vasectomy results in the loss of a man's status in society. All the participant women and 54.4% of men agreed that vasectomy as a method of FP is not a correct practice, and 100% of women and 18.4% of men agreed that vasectomy is a cultural taboo. Chi-square analysis of these figures revealed a statistically significant difference between the two groups ($p < .05$; see Table 4).

Discussion

This study was conducted to examine the opinions and attitudes of married couples living in Turkey about vasectomy and barriers to vasectomy use. Although there are

many studies on the use of FP in Turkey, thus far they have focused mostly on married women and men separately. This study about barriers to vasectomy use was conducted using couples in Turkey, and it is thought that the findings will fill the information gap in this regard.

Sociocultural factors influencing views about contraception were considered in this study. According to the results, 6 out of 10 participants stated not using any contraceptive method. More than 60% of women and more than 28% of men reported their opinion that FP is a sin, particularly the methods of tubal ligation and vasectomy; 43% of men thought having vasectomy is sin. More than half of the participating women stated that women are responsible for making decisions about contraceptive methods. These results are consistent with other studies. In the literature, fertility and use of FP methods are associated with religion, education level, and societal practices. Especially in

Table 2. Distribution of Participants' Opinions About Family Planning According to Gender (*N* = 700; Gaziantep, Turkey, 2013).

Variables	Gender						χ^2	<i>p</i>
	Women		Men		Total			
	<i>n</i>	%	<i>n</i>	%	<i>n</i>	%		
Currently using contraception?								
Yes	137	39.1	141	40.3	278	39.7	0.095	.817
No	213	60.9	209	59.7	422	60.3		
Use of family planning is a sin								
Yes	212 ^a	60.6	99	28.2	311	44.4	78.462	.000*
No	91	26.0	192	54.9	283	40.4		
Some methods	47	13.4	59	16.9	106	15.1		
Family planning methods viewed as a sin (<i>n</i> = 417) ^b								
Tubal ligation	222 ^a	85.7	90	57.0	312	74.8	78.462	.000*
Vasectomy	37	14.3	68	43.0	105	25.2		
Receiving information related to family planning								
Yes	84	24.0	180	51.4	264	37.7	56.047	.000*
No	266 ^a	76.0	170	48.6	436	62.5		
Source of information (<i>n</i> = 264) ^b								
Health care provider	14	16.7	71	39.4	85	32.2	24.318	.000*
Friend/family	70	83.3	109 ^a	60.6	179	67.8		

^aGroup forming the difference. ^bColumn totals vary by number of responses.

**p* < .05.

Muslim countries, religious belief is one of the most important factors influencing FP practices. In addition, the irreversibility of tubal ligation and vasectomy further affects the availability of both methods and, combined with uncertainty about the future, represents a major barrier to more widespread use of vasectomy (Frajzyngier, Bunce, Lusiola, Searing, & Riwa, 2006). A study from Nigeria indicated that no respondent with Islamic beliefs agrees to any degree of vasectomy use (Akpamu, Nwoke, Osifo, Igbinovia, & Adisa, 2010). Although Islam does not prohibit the use of contraception, some interpretations still appear to influence the overall use of contraception (Mahat, Pacheun, & Taechaboonsermsak, 2010). Orji, Ojofeitimi, and Olanrewaju (2007) reported that religion influenced the attitude of married Nigerian men toward FP. Another study reported that one of the reasons for not using any FP methods was religious belief (Onwuhafua, Kantiok, Olafimihan, & Shittu, 2005). A study on the usage of FP among Turkish married men indicated that two out of three men viewed FP as a sin in their religion (Kısa, Zeyneloğlu, & Delibaş, 2013).

The views of women concerning the use of vasectomy were particularly interesting. Almost 40% of the women reported having heard of vasectomy before the survey. Of those, more than 81% of women stated that vasectomy is a safe contraceptive method, but 79% of women did not approve of vasectomy as a FP method. These results are compatible with other studies. One of the most important barriers to vasectomy use is the negative opinions of

women toward vasectomy. According to Bunce et al. (2007), wives have a strong influence on the outcome of decisions about vasectomy as a contraceptive method. A cross-sectional questionnaire-based study from Nigeria, which aimed to assess the influence of the spouse on the man's decision to accept or reject vasectomy, reported that only 13.5% of women accepted vasectomy compared with 26% of men. Furthermore, 92% of the men who would agree to vasectomy stated that they will only do so if their spouses agree (Tijani, Ojewola, Yahya, Oluwole, & Odusanya, 2013). Most of the women stated that vasectomy does not have an adverse effect on men's health, on sexual health, or on married life. Only 10.1% of women had an opinion that vasectomy has a negative effect on marriage. Studies in recent years continue to support the idea that the use of vasectomy has no negative affect on the sexual lives of individuals. A study about the sex lives of nine women living with vasectomized partners determined that vasectomy proved to be a good method to enjoy and increase the frequency of sexual relations and sexual satisfaction among couples who could stop worrying about unwanted pregnancies (Cordoba, Mercado, & Sapién, 2010). In contrast, a study from India reported that fear of physical weakness resulting from the procedure would limit a man's ability to provide for his family. This belief was common among both men and women, and was one of the main barriers to acceptance of vasectomy use (Scott et al., 2011). A Chinese study revealed the increasingly popular views that vasectomy reduces

Table 3. Distribution of Participants' Opinions About Vasectomy Use According to Gender (N = 296^a; Gaziantep, Turkey, 2013).

Opinions	Gender						χ^2	p
	Women		Men		Total			
	n	%	n	%	n	%		
Participant has heard about vasectomy (n = 700)								
Yes	138	39.4	158	45.1	296	42.3	2.341	.146
No	212	60.6	192	54.9	404	57.7		
Participant sees vasectomy as a safe contraceptive method								
Yes	113 ^b	81.9	73	46.2	186	62.8	95.813	.000*
No	25	18.1	7	4.4	32	10.8		
Do not know	0	0.0	78	49.4	78	26.4		
Participant sees vasectomy as a difficult procedure								
Easy	41	29.7	33	20.9	74	25.0	8.995	.000*
Difficult	39	28.3	31	19.6	70	23.6		
Do not know	58	42.0	94 ^b	59.5	152	51.4		
Current environment includes people who have adverse reaction toward vasectomy								
Yes	82 ^b	59.4	65	41.1	147	49.7	22.208	.000*
No	0	0.0	19	12.0	19	6.4		
Do not know	56	40.6	74	46.9	130	43.9		
Participants' views affected by environment that is adverse to vasectomy								
Yes	116 ^b	84.1	71	44.9	187	63.2	48.460	.000*
No	22	15.9	87	55.1	109	36.8		
Willing to have vasectomy/tubal ligation								
Yes	29	21.0	18	11.4	47	15.9	5.106	.000*
No	109	79.0	140 ^b	88.6	249	84.1		
Number of children required before considering vasectomy/tubal ligation (n = 71) ^c								
3 children	17	37.0	14	56.0	31	43.7	18.652	.000*
4 children	29 ^b	63.0	5	20.0	34	47.9		
5 children and more	0	0.0	6	24.0	6	8.4		
Vasectomy's effect on men's health								
Does not affect	100 ^b	72.5	65	41.1	165	55.7	33.808	.000*
Affects negatively	38	27.5	93	58.9	131	44.3		
Vasectomy's effect on marriage								
Does not affect	124 ^b	89.9	96	60.8	220	74.3	33.566	.000*
Affects positively	0	0.0	6	3.8	6	2.0		
Affects negatively	14	10.1	56	35.4	70	23.7		
Reasons given for views about negative effects (n = 70) ^c								
Environmental	14	100.0	35 ^b	62.5	49	70.0	7.500	.006*
Sexuality	0.0	0.0	21	37.5	21	30.0		
Vasectomy's effect on sexual health								
Does not affect	133 ^b	96.4	98	62.0	231	78.0	50.823	.000*
Affects positively	0	0.0	4	2.5	4	1.4		
Affects negatively	5	3.6	56	35.4	61	20.6		

^aResponses of participants who had heard vasectomy. ^bGroup forming the difference. ^cColumn totals vary by number of responses.

*p < .05.

sexual potency, causes impotence, or makes men physically weak, all of which were cited as reasons for why the widespread use of vasectomy before 1990 in China began to decline after 1990 (Nian et al., 2010). The reason given for views about negative effects of vasectomy on marriage is the influence of society's perspective.

Regarding responses to sociocultural propositions about vasectomy, more women reported negative views about vasectomy. All the participating women in this study reported their opinion that vasectomy as a birth control method is imposed by Western countries and is not suitable for Turkish men, that having a vasectomy is

Table 4. Distribution of Participants' Responses to Propositions About Vasectomy According to Gender ($N = 296^a$; Gaziantep, Turkey, 2013).

Propositions	Gender						χ^2	p
	Women		Men		Total			
	n	%	n	%	n	%		
Vasectomy is imposed by Western countries and is not suitable for Turkish								
Agree	138 ^b	100.0	47	29.7	185	62.5	1.551	.000*
No opinion	0.0	0.0	16	10.1	16	5.4		
Disagree	0.0	0.0	95	60.1	95	32.1		
Vasectomy results in loss of a man's status in society								
Agree	138 ^b	100.0	56	35.4	194	65.5	1.359	.000*
No opinion	0.0	0.0	14	8.9	14	4.7		
Disagree	0.0	0.0	88	55.7	88	29.7		
If a married couple does not want to have more children, men should be responsible for contraception								
Agree	0.0	0.0	17	10.8	17	5.7	20.758	.000*
No opinion	0.0	0.0	5	3.2	5	1.7		
Disagree	138 ^b	100.0	136	86.1	274	92.6		
Vasectomy has a psychologically negative effect on men								
Agree	138 ^b	100.0	86	37.8	224	75.7	83.099	.000*
No opinion	0.0	0.0	23	100.0	23	7.7		
Disagree	0.0	0.0	49	100.0	49	16.6		
Men with a vasectomy lose their authority in the family								
Agree	0.0	0.0	50	31.6	50	16.9	86.177	.000*
No opinion	0.0	0.0	24	15.2	24	8.1		
Disagree	138 ^b	100.0	84	53.2	222	75.0		
Use of vasectomy as a method of family planning is not a correct practice								
Agree	138 ^b	100.0	86	54.4	224	75.7	83.099	.000*
No opinion	0.0	0.0	24	15.2	24	8.1		
Disagree	0.0	0.0	48	30.4	48	16.6		
Vasectomy is important for the health of the family								
Agree	0.0	0.0	43	27.2	43	14.5	72.742	.000*
No opinion	0.0	0.0	22	13.9	22	7.5		
Disagree	138 ^b	100.0	93	58.9	231	78.0		
Vasectomy is suitable for poor people								
Agree	0.0	0.0	14	8.9	14	4.7	12.835	.000*
Disagree	138 ^b	100.0	144	91.1	282	95.3		
Having many children gives a man status in society								
Agree	95	68.8	43	27.2	138	41.6	1.591	.000*
No opinion	43	31.2	5	3.2	48	16.2		
Disagree	0.0	0.0	110 ^b	69.6	110	37.2		
Vasectomy is a cultural taboo								
Agree	138 ^b	100.0	29	18.4	167	56.4	1.997	.000*
No opinion	0.0	0.0	36	21.5	34	11.5		
Disagree	0.0	0.0	95	60.2	95	32.1		
Having a large number of children is important for elder care								
Agree	138 ^b	100.0	48	20.4	186	62.8	1.529	.000*
No opinion	0.0	0.0	18	11.4	18	6.7		
Disagree	0.0	0.0	92	58.2	92	31.1		
Tubal ligation for women is easier than vasectomy								
Agree	138 ^b	100.0	41	15.9	179	60.5	1.690	.000*
No opinion	0.0	0.0	83	52.5	83	28.0		
Disagree	0.0	0.0	34	21.5	34	11.5		

(continued)

Table 4. (continued)

Propositions	Gender						χ^2	p
	Women		Men		Total			
	n	%	n	%	n	%		
Men lose their sexuality after vasectomy								
Agree	124 ^b	89.9	21	13.3	145	49.0	1.766	.000*
No opinion	14	10.1	73	46.2	87	29.4		
Disagree	0.0	0.0	64	40.5	64	21.6		
Men do not get pleasure from sexual intercourse after vasectomy								
Agree	95 ^b	68.8	19	12.0	114	38.5	1.205	.000*
No opinion	43	31.2	79	50.0	122	41.2		
Disagree	0.0	0.0	60	38.0	60	20.3		

^aResponses of participants who had heard vasectomy. ^bGroup forming the difference.

*p < .05.

not a correct FP practice, that vasectomy has a psychologically negative effect on men, that vasectomy is a cultural taboo, and that vasectomy results in loss of a man's status in society. More than half of the women stated that vasectomized men will not experience pleasure from sexual intercourse. A study from India reported that a perceived reduction in men's sexual performance served as another barrier to the use of vasectomy. This concern was more frequently expressed by women (Scott et al. 2011). In the Philippines, vasectomy use is not widely accepted partly due to fears of loss of sexual performance and a possible change in sexual orientation (Clark, Flavier, Jimenez, Lee, & Solomon, 2007). Some of the opinions, such as that vasectomy as a birth control method is imposed by Western countries, are more widespread and persistent in southeastern Turkey, where the majority of people come from minority populations. There is a big difference between men and women on the opinion of "vasectomy is a cultural taboo." Although the study participants came from the same culture, more women than men see vasectomy as a cultural taboo. These views are thought to arise from the roles society imposes on women and men. Turkish society is a patriarchal society. In traditional societies, like in Turkey, birth control is a responsibility given to women, and one of the determinants of women's social status is the number of children they have. Thus, societal status is considered to be the reason they are opposed to vasectomy. Women in southeastern Turkey have low levels of education, and most do not work outside of the house. In this region, the fertility rate is high compared with that of other parts of the country. The overall fertility rate in Turkey is 2.26 children per family, but in eastern and southeastern Anatolia, it is higher than 3.41 children per family (TDHS, 2013). Couples who do not have any children or who have not had any male children are excluded from society. Other

results of this study support this idea. Seventy-two percent of women said that the responsible partner for decisions about FP was the woman. In addition, the majority of women stated that use of vasectomy as a method of FP is not a correct practice. Furthermore, all the women stated that tubal ligation is easier than vasectomy. These results indicate that the implementation and success of FP methods are a responsibility given to women.

Examining men's opinions regarding vasectomy reveals that majority of the men (88.6%) did not want to have vasectomy. Similar findings were reported in other studies. A recent study reported that the most of the respondents (97.0%) were aware about vasectomy as method of sterilization in men, but only 1% was practicing (Saoji, Gumashita, Hajare, & Nayse, 2013). A study of Turkish urologists indicated that 43.6% of their participant patients did not want to have a vasectomy and none of the urologists would choose vasectomy for themselves (Asan, Ateşçi, Gündüz, Gümüş, & Lekili, 2004). A study from Nigeria indicated that only 1.6% of male participants agreed that vasectomy should be used as a method of contraception (Akpamu et al., 2010). Mahat et al. (2010) indicated that the misconceptions and beliefs based on cultural feelings had a great role in refusal by men for choosing the option of vasectomy. In the present study, one out of two men stated that he did not know whether vasectomy is a safe procedure, and more than 45% of the men had not heard of vasectomy before the study. Almost 60% of men did not know whether vasectomy was a difficult procedure or not. A majority of men did not agree with most of the propositions about vasectomy, such as that vasectomy is imposed by Western countries and is not suitable for Turkish men, that vasectomy results in a loss of a man's status in society, and that having many children gives a man status in society, and so on. The information that they did acquire about FP was

sourced mainly from family and friends that are not reliable, evidence-based sources. These results indicate that there is a lack of information about the vasectomy procedure rather than false beliefs among Turkish men. In studies, one of the factors determined to influence the use of vasectomy was lack of information (Frajzyngier et al. 2006). In one study, the low level of knowledge was cited as the cause of low levels of acceptance of vasectomy in Nigeria (Akpamu et al., 2010). A study from China indicated that the factors influencing the use of vasectomy included lack of knowledge, misconceptions, and rumors (Nian et al., 2010). In developing countries, although men agree that FP is the responsibility of both partners in a couple, men also believe women should use contraceptive methods when the need for FP arises, and thus they do not want to receive information on FP.

It seems that men have more concerns about sexuality when compared with women. More than 35% of men stated that vasectomy affects sexual health and marriage life. The second reason given for views about negative effects of vasectomy on marriage was stated to be sexuality. More than half of the men had an opinion that a vasectomy procedure has a negative effect on men's health. These results were consistent with other studies. A study by Shih, Dubé, Sheinbein, Borrero, and Dehlendorf (2013) indicated that reasons not to choose vasectomy included negative associations with the term *sterilization*, loss of manhood, and permanence. Misconceptions about vasectomy included misunderstandings about the vasectomy procedure and adverse postvasectomy sexual function. Thus, availability and utilization of the various methods of contraception result in part from users' considerations of the effects and also from restrictions of contraceptive methods on sexual intercourse and sexual satisfaction. A study by Mohamad Al-Ali et al. (2014) indicated that vasectomy has no impact on the sex life of men. A study from Saoji et al. (2013) reported that the largest number of respondents (28.5%) believed that women are best suited for surgical contraceptive methods, and 19.5% believed vasectomy would lead to general weakness and might result in reduced sexual performance. Similarly, Hosseini and Abdi. (2012) indicated that the main concerns of men regarding vasectomy were its impact on their sex life or sexual performance, the stress of infertility and early aging after the vasectomy, and the fear of surgery.

Conclusion

Three hundred fifty couples were included in this study. Sociocultural factors, such as ideas that contraception is the woman's responsibility, that sterilized men lose status in society, or that sterilized men lose authority in the family, along with misconceptions about vasectomy, such as

that it has psychologically negative effects, that it causes sexuality related issues, that it is imposed by Western countries to decrease Turkish populations, or that it is suitable for poor people, as well as a lack of information were determined to be the main barriers for vasectomy use in Turkish culture. It was determined that women have more negative opinions regarding vasectomy use than men, but that more than half of the men were opposed to vasectomy as a FP method. As a result, a twofold response is recommended: determine strategies to overcome sociocultural barriers to raise awareness and increase the utilization rate of vasectomy; and integrate training and consultancy regarding the use of vasectomy in FP services, including the design of couple-specific education programs for couples with many children. Finally, to raise awareness of vasectomy, FP services and education must be expanded and oriented toward women and men together. To decrease misconceptions, fears, and rumors, a large-scale campaign should be carried out with reliable, evidence-based sources.

Limitations

There are several limitations to this study. First, this study was a cross-sectional study with a nonrandom convenience sample. Therefore, it includes all the limitations of a cross-sectional study. However, when we think about the difficulty of finding men willing to talk about their reproductive and sexual history, this study's large sample size adds valuable information. Second, this study is not free from recall biases. The couples' responses to questions related to the practice of FP methods and sexual life in the past are potentially subject to recall bias. Third, there is a potential response bias. Participants may have intentionally given misleading answers to questions about sexuality. There is also a selection bias as the research was done only on the volunteers. Finally, the sample included only one hospital in Gaziantep and 350 couples, which may limit the generalizability of our findings to other populations.

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