Original Article

Effect of the Contraceptive Methods on Female Sexual Function

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Abstract

Background: Different contraceptive methods have different effects on the sexual lives of couples/individuals.
Objective: This research was designed in order to determine the effect of the contraceptive methods on female sexual function.
Methods: The study which is planned as a diagnostic type is realized following the permission of the ethical board commission of in a university hospital in Istanbul. The population of the study is formed of women of 18 years old and older who applied to the between January and July 2011. The sample of the study is formed through the nonprobability sampling method from the women who didn't have a psychiatric disease, mental retardation and who were sexually active and agreed to join the study (n=479). As research instruments, an interview form and Female Sexual Function Index (FSFI) that evaluated sexual dysfunction were used.
Results: It is determined that the women who use intra uterine device (IUD) as a contraceptive method have significantly lower FSFI subscale scores of desire average in comparison to the women who use contraceptives. In this study was determined that they still use the withdrawal method as a traditional contraceptive method no negatively affects sexual life in women.
Conclusions: It is determined that some of modern contraceptive methods partly negative effects on sexual life in women.

Key words: Contraceptive method; Health; Sexuality; Women.

Introduction

The World Health Organization (WHO) describes the sexual health as a state of physical, mental and social well-being in relation to sexuality which positively enrich and strengthen the personality, communication and love (WHO 2004). According to WHO the sexuality is a central aspect of being human throughout life encompassing sex, gender identities and roles, sexual orientation, eroticism, pleasure, intimacy and reproduction. Everyone has right to access sexual information and to experience sexual relation for the purpose of pleasure or reproduction (WHO 2004).

One of the most significant control mechanisms that women benefit in reproduction and in the organization of their sexual functions is the contraceptive method (Gabalci 2008; Martin-Loeches et al 2003). This health service provides the couples to choose the most appropriate contraceptive method for themselves and to experience their sexuality freely (Vural and Gonenc 2011).

In literature it is determined that the effects of the contraceptive methods to the sexual life of women should not be ignored (Gabalci 2008; Martin-Loeches et al 2003; Vural and Gonenc 2011; Shah and Hoffstetter 2010). Generally, the use of contraceptive methods affect the sexual

function positively because it eliminates the fear of pregnancy (Vural and Gonenc 2011; Shah and Hoffstetter 2010). Different contraceptive methods have different effects on the sexual lives of couples/individuals. The studies determine that the effects of the hormonal contraceptives on well being and sexual function are dependent on the satisfaction related to the contraceptive method, the effects of the hormones on mood and body (Gabalci 2008; Martin-Loeches et al 2003; Vural and Gonenc 2011; Shah and Hoffstetter 2010).

According to the results that examine the affects of the hormonal contraceptives on sexual function it is shown that some women's lives are affected positively, some are affected negatively and most of them did not experience a change (Guida et al 2005; Raymond et al 2004; Sanders et al 2001). It is determined that the condom which is the most effective way for getting protected from sexually transmitted diseases including HIV infection, has an effect of increasing the erection time and orgasm but also causes problems such as the decrease of sexual drive and not having pleasure during intercourse in men (Gabalci 2008; Sanders et al 2001).

The Intra Uterine Device (IUD) which is the widely known effective contraceptive method has positive sexual function effects such as not interrupting the sexual relation and protecting effectively against pregnancy but it is determined that it might cause IUD related irritation in men (Raymond et al 2004).

It is determined that the withdrawal method which the most widely used traditional contraceptive method in our country is believed to be reliable by the couples but as it is not a medical method and as the partner has to withdraw at the peak point of the sexual intercourse it prevents to reach to the sexual satisfaction and causes post intercourse tension and for that reason has negative effects on sex life (Karakoyunlu 2007; Yanikkerem et al 2006).

In the studies it is determined that the contraceptive methods have various positive and negative effects on the sex lives of couples/individuals (Guida et al 2005; Raymond et al 2004; Sanders et al 2001; Karakoyunlu 2007; Yanikkerem et al 2006; Gabalci 2008; Sanders et al 2001). It is important to know the effects of the contraceptive methods on the sex lives of individuals/couples. Because in our society as the contraceptive and sexuality issues are not discussed clearly and comfortably and as they are considered as taboo, they are indicated as the issues that cannot be discussed by the users of the methods and also by the healthcare providers.

Because the nurses which are part of the healthcare professionals have roles in informing, educating and consulting, their consultancy in the selection of the appropriate contraceptive method of the individuals/couples, their guidance in the proper use of the selected method and their serious direction when a negative problem on sexual function is observed will contribute in increasing the quality of the sex life (Vural and Gonenc 2011; Gabalci 2008; Ertop 2009; Salonia et al 2004).

Nowadays the effects of the used contraceptive methods on the sex life of women is an increasingly discussed subject. In this direction the research is planned for determining the effects of the contraceptive methods which allow women to sustain a safe and happy sex life and to make a free decision about their reproduction, on the sex life of women.

Methods

Study Design

This descriptive study was performed at a university infertility outpatient clinic in Istanbul, Turkey. The data was collected between January and July 2011. Written ethical approval was obtained from the institutional review board of the hospital prior to study.

Study Sample

Totally, 586 women over 18 years of age or their healthy female companions (relatives, friends, etc.) were interviewed in the infertility outpatient clinics of the Department of obstetrics and gynecology in a university hospital in Istanbul.

The sample of the study is formed through the nonprobability sampling method from the women who didn't have a psychiatric disease, mental retardation and who were sexually active and agreed to join the study.

All participants were informed about the aims of the study, and they provided informed consent. In this study, 73 participants who rejected to participate, 34 women did not meet the inclusion criteria were excluded from the study.

The remaining 479 women who met the participation criteria and agreed to take part in the study were included in the study.

Data Collection

The data are obtained through, the Indicative Information Formulary prepared in accordance with the literature, Female Sexual Function Index (FSFI) of which the Turkish validity safety study is accomplished. The indicative information formulary included questions related to the socio-demographical specifications such as age, education status and working status of women and also gynecologic-obstetric specifications such as their reproduction tract infection history, dyspareunia, preferred contraceptive methods, sexual intercourse frequency (week), first sexual intercourse experience, sexual partner, sexual problems of the partner. In order to evaluate the sexual function of women within the last four weeks the Women Sexual Function Index (FSFI) is used. The Women Sexual Function Scale is developed by Rosen et al. in 2000 and is adapted to Turkish in 2005 by Aygin - Aslan and its validity and safety study is realized (Rosen et al 2000; Aygin and Aslan, 2005). This is a multidimensional scale formed of six sections - arousal, lubrication, orgasm, satisfaction and pain – and is including 19 articles. In the scale each domain is scored as 0 or 1 through 6 and the highest score is calculated as 36.0 and the lowest score is calculated as 2.0. The group of women with sexual problems is described according to the breakpoint of 26.55 determined by Meston and Rosen (2005) (Wiegel et al 2005). In the research the data are collected through two questionnaire which were filled in at one time via self report method by the researchers' face to face interview.

Data analysis

The data are evaluated in SPSS 13.0 packaged software, by using number, percentage, student's t-test, Mann Whitney U test, chi-square significance test, unidirectional Anova analysis techniques.

Results

The approximate age of the women who participated to the study is determined as 31.99±6.68 (min;18-max;48), their approximate duratin of education is determined as 9.53±4.16 years (min;0-max;15). It is determined that 49.7% of the women have an education period of 8 years or below and 66% percent of the women were working (Table-1). It is determined that the average parityin women who participated to the study is 1.46±1.15 (min;0-max;6) and average number of sexual intercourse is 2.38±1.26 (min;0-max;10). It is determined that most of the participants experienced their first sexual intercourse after they got married (88.3%) and they are monogamous (97.9%) and more than a half of them got married following a period of dating (53.9%). 22.1% of the women stated that their husband have a sexual problem (1.9% (n=9) lack of sexual drive, 12.7% (n=61) premature ejaculation, 4.6% (n=22) erectile dysfunction, 3.1% (n=15) both premature ejaculation and erectile dysfunction), and 19.8% stated that their husbands have chronic health problems. From the group of studied women 49.1% use Withdrawal method, 18.2% used condom, 18.1% used IUD, 10.1% used OC and minimum 4.5% used tubal sterilization as contraceptive method.

When the FSFI scale sub dimension and total score averages are compared according to the contraceptive methods, it is determined that there is not a statistically significant difference between the subdimension score averages except desire sub dimension score average according to the used contraceptive method ($p>.05$, Table-2).

It is determined that the women who use intra uterine device (IUD) as a contraceptive method have significantly lower FSFI desire sub dimension score average in comparison to the women who use contraceptives (p:.03), and also there is no significant difference between the FSFI scale total score averages between the other contraceptive methods ($p>.05$, Table-2).

When age and education period (from the demographical qualities) of the participants are compared in accordance to their method of choice, the age average and education period of the ones who use ineffective contraceptive methods is significantly lower than the ones who use an effective contraceptive method ($p<.05$). No statistically significant difference is determined between the working status and use of a method use the women ($X^2=3.387$, P=.06, Table-3).

From the obstetric-gynecological and sexual life specifications of the participants birth giving and sexual intercourse rate is compared by their use of method and it is determined that women who use effective contraceptive method have

significantly lower birth giving rate than the ones who use ineffective contraceptive method (U=-2.673, p=0.008). There is no significant difference between the sexual intercourse rate of the women who use an effective contraceptive method and who use an ineffective contraceptive method (p>0.05). No statistical difference is found between the dyspareunia situation, reproductive tract infection and partner related sexual problems (p>.05, Table-3).

The age and education period of the socio-demographic qualities of the participants are compared according to ≤26.55, >26.55 cut-off point. It is determined that the women who obtained a lower score than the cut-off point of the scale (≤26.55) have a significantly higher age than the women who obtained a higher score than the breakpoint of the scale (>26.55) (t=2.806, P= .005), but according to the education period it is determined that there were no differences (t=-0.941, P= .347) (Table-3). According to the working status of the women, no significant difference has been found in relation to the cut-off point of the scale (X^2=1.608, P= .20, Table-3).

When the birth giving and sexual intercourse number (from the obstetric-gynecological and sexual life specifications) is compared in accordance with the FSFI cut-off point, it is determined that women who obtained a lower score than the cut-off point of the scale (≤26.55) have a birth giving rate higher than the women who obtained a higher score than the cut-off point of the scale (>26.55) (U=-2.783, p= .005) and that the women who obtained a lower score than the cut-off point of the scale (≤26.55) have a significantly lower sexual intercourse rate when compared with the women who obtained a higher score than the cut-off point of the scale (>26.55) (t=-3.609, P= .000, Table-3)

The dyspareunia of the women, the genital tract infection, partner related sexual problem, the setting at marriage and the way of sharing sexuality is compared through chi-square analysis in the classification realized according to 26.55 (the FSFI scale cut-off point) and it is determined that when the women with reproductive tract infection/without reproductive tract infection (X^2=22.169, P= .000), the women who have a partner with sexual problem/the women who have a partner without sexual problem (X^2=21.071, P= .000), the women who had an arranged marriage/the women who got married following a dating period (X^2=9.249, P= .002) and the women who don't share sexuality with their husband/who share with their husband (X^2=7.093, P= .008) are compared, they are more commonly within the group with lower score in comparison to FSFI scale cut-off point (≤26.55) (p< .05). It is determined that the women who participated to the study had no statistically significant difference in relation to the method used according to FSFI scale cut-off point (p> .05, Table-3).

Discussion

Sexuality is an inseparable part of the human life. A healthy sexual life is one of the most important parameters of the health and quality of life. Contraceptive is a concept which affects couples in having a baby. It is stated that the fear of pregnancy or the desire of pregnancy could affect the sexual desire and performance and also that the contraceptive methods used in order to prevent pregnancy have an effect on sexual life. According to TNSA-2008 data it is determined that 57.2% of the women use a modern method between 35-39 years. In the study it is determined that the percentage of the women using any kind of modern protection is increasing with the age. Also it is determined that the education level of the women using modern methods is higher than the ones using withdrawal method. According to TNSA-2008 results it is seen that the education level effects the use of modern method and that the use of modern method increases as the education level increases. Our study result is in parallel with the TNSA-2008 result. In some studies even though it is determined that there is a relation between the women having a profession and the use of modern method (Mayda et al 2005; Tokuc et al 2005; Biri et al 2005), in this study no difference is found between the use of method in women with profession and without profession. In the literature it is determined that the contraceptive methods used could affect the sexual relationship in a positive or negative way. In the study realized by Gabalci 83.6% of the women using the traditional method stated that their sexual intercourse rate is not affected and 16.3% of the women stated that their sexual intercourse rate is affected negatively. In the same study women using IUD, condom and oral contraceptive as modern methods stated that these don't have any effect on their sexual intercourse rate (Gabalci 2008).

Age	Number (n)	Percentage (%)
<32 years	233	48.6
≥32 years	246	51.4
Education		
≤8 years	238	49.7
>8 years	241	50.3
Employment Status		
Employed	160	33.4
Unemployed	319	66.6
Number of childbirths		
< 2	251	52.4
≥2	228	47.6
Sexual intercourse		
≤2 (week)	279	58.2
>2 (week)	200	41.8
Age at first sexual intercourse		
Before getting married	56	11.7
After getting married	423	88.3
Marriage Type		
Family initiated	221	46.1
Lovely	258	53.9
Individuals sexual relationship		
Multiple partners	10	2.1
One partner	469	97.9
Relationship with Partner		
Good	363	75.8
Poor	116	24.2
Dyspareunia		
Yes	177	37.0
No	302	63.0
Genitourinary tract infection		
Yes	185	38.6
No	294	61.4
Sexual problems in partner		
Yes	106	22.1
No	373	77.9
Chronic Disease in partner		
Yes	95	19,8
No	384	80,2

Table-I: Participant Characteristics (n=479)

Table-II: The Comparison of the FSFI Scale Sub-Dimension and Total Score Average according To the Contraceptive Methods Used By the participants (n=479)

Contraceptive methods currently being used	**The Female Sexual Function Index (FSFI) Subdimension Variable**						
	Desire	**Arousal**	*Lubrication*	*Orgasm*	*Satisfaction*	*Pain*	*FSFI Total*
	Mean±SD	*Mean±SD*	*Mean±SD*	*Mean±SD*	*Mean±SD*	*Mean±SD*	*Mean±SD*
Withdrawal method[a] (n:235)	3.85 ± 1.01	4.03 ± 1.05	4.92 ± 0.97	4.55 ± 1.19	4.75 ± 1.04	4.74 ± 1.34	26.78 ± 4.68
Condom[b] (n:87)	3.88 ± 0.78	4.26 ± 0.90	5.10 ± 0.79	4.69 ± 0.96	4.89 ± 1.01	4.69 ± 1.27	27.54 ± 3.98
Oral Hormonal Contraceptive[c] (OC) (n:49)	4.06 ± 0.95	4.24 ± 1.13	5.08 ± 0.94	4.71 ± 0.99	4.92 ± 0.97	4.76 ± 1.07	27.78 ± 4.54
Intrauterine Contraceptive Device[d] (IUCD) (n:87)	3.57 ± 0.83	4.08 ± 1.01	4.86 ± 0.93	4.57 ± 1.08	4.48 ± 1.09	4.64 ± 1.26	26.23 ± 4.22
Tubal Sterilization[e] (n:21)	3.54 ± 0.94	3.88 ± 1.16	5.02 ± 0.91	4.47 ± 1.08	4.47 ± 1.08	4.10 ± 1.26	26.32 ± 5.00
Test value(F)	***2.952****	*1.202*	*0.988*	*0.520*	*2.163*	*0.072*	*1.512*
P value	*.02*	*.309*	*.413*	*.720*	*.072*	*.990*	*.197*
	c > d						

The scores are presented as means ± standard deviations. **F**: One -Way Anova testi. *Statistical significance p< 0.05 between groups.

Table-III: The Comparison of FSFI Scale According To The Socio-demographic, Obstetric-Gynecological and Sexual Life Qualities of the Participants

	The Female Sexual Function Index (FSFI)					
Variable	**FSFI 26.55↓***		**FSFI 26.55↑***			
Descriptive characteristics	**Mean±SD**		**Mean±SD**		**Test**	**P**
Age (years)	32.97 ± 6.67		31.25 ± 6.60		**t=2.806**	**.005***
Education (years)	9.33 ± 4.04		9.69 ± 4.24		t=-.941	.347
Employment Status	**n**	**%**	**n**	**%**	**χ^2**	**P**
Employed (n:160)	62	30.2	98	35.8	1.608	.205
Unemployed (n:319)	143	69.8	176	64.2		
Obstetric - gynecological characteristics and Sexual Health						
Parity	1.62 ± 1.14		1.34 ± 1.15		**z_{mw} =-2.783**	**.005***
Sexual Frequency (per week)	2.14 ± 1.12		2.55 ± 1.33		**t=-3.609**	**.001****
Dyspareunia	**n**	**%**	**n**	**%**	**χ^2**	**P**
Yes	111	54.1	66	24.1	**45.478**	**.001****
No	94	45.9	208	75.9		
Genitourinary tract infection						
Yes	104	50.7	81	29.6	**22.169**	**.001****
No	101	49.3	193	70.4		
Sexual problems in partner						
Yes	66	32.2	40	14.6	**21.071**	**.001****
No	139	67.8	234	85.4		
Marriage Type						
Family initiated	111	54.1	110	40.1	**9.249**	**.002***
Lovely	99	45.9	164	59.9		
Relationship with Partner						
Good	143	69.8	220	80.3	**7.093**	**.008***
Poor	62	30.2	54	19.7		
Contraceptive methods currently being used						
Withdrawal method (n:235)	104	50.7	131	47.8	0.400	.527
Modern methods (n:244)	101	49.3	143	52.2		

* FSFI total score of 26.55 to be the optimal cut score for differentiating women with and without sexual dysfunction. Low FSFI score" was defined as an adjusted FSFI cut-off below 26.55 which could be a sign of sexual complaints. FSFI score above 26.55 was defined as a "High FSFI score". *Statistical significance p< 0.05 between groups. **Statistical significance p< 0.001 between groups. z_{mw}: Mann-Whitney U test. χ^2: Ki-kare test. **t**: Student's-t test.

Women participating to the study stated that they only used the withdrawal method as a traditional method. For that reason the withdrawal method is taken as an ineffective method. In the research no difference is determined in the number of intercourse between the women using the withdrawal and women using effective methods as a protection method. The result of the study is similar to the results of the Gabalci's study.

The realized studies revealed that the use of the protection method increases with the increase in the number of surviving children (TNSA-2008). According to TNSA-2008 data it is determined that the use of modern methods is 53.7% and in its highest level is in women with two children. In the study it is determined that women using a modern method gave birth more times than the women using the withdrawal method. The result of the study is similar with TNSA-2008 and the results of the other realized studies.

Even though it is determined that some of the methods can affect the sexual life negatively because of their side effects (such as infection) (Bertiken and Aslan 2001; Gabalci 2008), no difference is found between the women using the withdrawal method and women using modern methods in terms of painful sexual intercourse, reproductive tract infection and sexual problems in partner.

According to TNSA-2008 data in Turkey 46% of the married women use modern contraceptive methods and 27% of the married women use the traditional contraceptive method. It is determined that women mostly use withdrawal method as a traditional contraceptive method and IUD (17%) and pills (14%) mostly as modern methods (TNSA-2008).

The women who participated in the research stated that 49.1% of them use the withdrawal method, 18.2% use IUD and condom and 10.2% use pills. The result of the research is in parallel with TNSA-2008 data. In the study when the FSFI score average distribution is examined no significant difference is found according to their method of contraceptive except the desire sub dimension. Similar to the research results of Safarinejad'ın (2006) and Aydos et al. (2005) no significant difference is found between the women using a contraceptive method and women not using a contraceptive method (Safarinejad 2006; Aydos et al 2005).

Although there are some studies showing that contraceptives do not have any negative effect on sexual function, there are also studies showing otherwise. In the literature, it is emphasized that the oral contraceptives positively influence the sexual life of couples and increase the rate of sexual intercourse and sexual desire by the way of not interrupting the intercourse and diminishing the fear of pregnancy (Guida et al 2005). It is informed that contraceptives could affect the women's sexual life negatively by increasing the emotional sensitivity and decreasing the sexual interest and vaginal lubricity (Sanders et al 2001). In the study realized by Sabatini et al. and Sanders et al. it is determined that oral contraceptives decrease the sexual desire and satisfaction (Sabatini et al 2006; Sanders et al 2001). However Raymond et al. determined that sexual pleasure and sexual stimulation increased significantly in women who use oral contraceptives (Raymond et al 2004). While IUD does not interfere with the sexual intercourse and thus effects the sexual life positively, it is determined that problems caused by IUD use (such as back pain and inguinal pain, irregularity in menstrual cycle, intermediate bleeding, dysmenorrhea) could affect the sexual life negatively (Balci et al 2005; Dilbaz 2005). In the study realized by Gabalci it is determined that the sexual desire level of the women using IUD is not affected and it is not affected more than half of the women using oral contraceptives and very few women (n=16) stated that their sexual level is affected positively (Gabalci 2008). In the study it is determined that women using IUD as a contraceptive method obtained a lower score in comparison to the women using oral contraceptives in the desire **s**ubdimension of FSFI scale**.** The result of the study is similar to the studies of Raymond et al. and Balci and Dilbaz.

Sexuality is a complex integrity having biological, psychological, social, cultural, traditional, ethical, religious, anthropological, political and economic dimensions (Incesu 2005). In women the sexual dysfunction is a complex problem which is affected from various biological, psychological and individual factors (Salonia 2004). The sexual dysfunction in women increases with age and it is determined that it is a problem effecting 30% to 50% of women (Berman et al 2000). The anatomical and physiological changes occurring in women

because of aging can cause an elongation in time of stimulation, lubrication and orgasm and also a decrease in the level of orgasm (Alici 2004). In the study it is determined that the FSFI score decreases with the age. The result of the study is in accordance with the literature.

The education level of the women is an important variable in percepting and interpreting the sexual life. In the study no difference is determined between the education periods according to the FSFI scale cutoff score. Consistent with this it is also determined that education level does not have any effect on sexual functions in the study of Guvel (Guvel 2003). As the education level, working status or economic activities can play an important role in the improvement of women's positions. This occasions affects women's quality of life and therefore sexual life positively (Karakoyunlu 2007).

Elnashar et al. determined in their study that there is no relationship between the working status and income and sexual dysfunction, whereas Gabalci and Karakoyunlu detected in their studies that there is a relationship between the economic status and sexual dysfunction. The results of this study is similar with Elnashar et al. study.

This was considered to be related with the fact that when compared with women don't work women who work consisted of employees who worked in jobs that required shifts and got a low payment.

In this study 47.6% of the women who participated to experienced two and more childbirth. In the study it is determined that women who obtained scores lower than the FSFI scale cutoff score gave more birth. In the study realized by Cayan et al. (2004) on 179 Turkish women between ages 18-66, it is determined that the sexual dysfunction rate was high in multiparous women (Cayan et al 2004). In the study realized by Karakoyunlu and Saferinejad findings obtained were supporting the research (Karakoyunlu 2007; Safarinejad 2006). In the previous studies it is determined that there was a parallel relationship between sexual desire and sexual intercourse rate and that these were affecting the sexual satisfaction (Ege et al 2010; Gabalci 2008). In this study it is determined that women with lower FSFI scale cutoff score had lower sexual intercourse rate. In the study realized by Ege et al. (2010) and Elnashar et al. (2007), Valadares et al. (2008) it is determined that urinary tract infection and dyspareunia during sexual intercourse is related with sexual dysfunction (Valadares et al 2008; Ege et al 2010; Elnashar et al 2007). In the study realized by Elnashar et al. İt is determined that 31.5% of the women had dyspareunia during the sexual intercourse. Valaderes et al. determined that 39.5% and Ege et al. determined that 45.1% of the women had dyspareunia problem during the sexual intercourse (Ege et al 2010; Elnashar et al 2007). In a similar way 37% of the women who participated in the study stated that they experience pain during sexual intercourse and it is determined that these women had lower scores according to the FSFI scale cutoff score. Even though its rate is decreased in educated and young population, it is determined that most of marriages are still in arranged form throughout Turkey (Karakoyunlu 2007). Karakoyunlu determined that sexual functions are affected negatively in women in arranged marriages (Karakoyunlu 2007). The result of the study is similar to the work of Karakoyunlu.

The marital life is affected from the health status of the man and woman, their perception of sexuality and sexual life, their roles and expectations as woman and man and their satisfactions and dissatisfactions in relation with those. A compatible sexual life allows men and women to have a happy marital life and to reach a concordance and satisfaction (Ertop 2009; Gabalci 2008; Sirin and Soylemez 2001). In the studies realized it is determined that there was a significant relationship between sexual concordance and happiness in marriage and that failure in sexual relationship caused noncompatibility between couples (Ertop 2009; Gabalci 2008). In the study it is determined that women who had a husband with sexual problems and who did not share sexuality with their spouses had significantly higher sexual dysfunction rate. The result of the study is similar to the results of Ertop and Gabalci.

In the literature it is determined that modern contraceptive methods decrease the fear of pregnancy and don't interfere with the sexual life thus affect the sexual life in a positive way, although these methods might affect the sexual intercourse negatively because of their various side effects (Gabalci 2008; Martin-Loeches et al 2003; Vural and Gonenc 2011; Shah and

Hoffstetter 2010; Guida et al 2005; Raymond et al 2004; Sanders et al 2001). Even though the withdrawal method in which man is more active has no medical side effects it might decrease the sexual satisfaction of the man and woman because it requires interruption of the intercourse (Safarinejad 2006; Aydos et al 2005; Karakoyunlu 2007; Yanikkerem et al 2006). According to TNSA-2008 data one of four women in our country determined that they still use the withdrawal method as a traditional contraceptive method (TNSA 2008). In the study realized by Yanikkerem (2006) it is determined that 84.4% of the women is happy with using the withdrawal method but the satisfaction by using this method during the intercourse is lower (73.6%) (Yanikkerem et al 2006). In the study realized by Gabalci a significant number of women using the withdrawal method stated that it did not affect their sexual satisfaction (48.9%) and sexual desire (80%) (Gabalci 2008). In the study no difference is found between the withdrawal method and modern contraceptive methods in affecting sexual function, according to FSFI scale cutoff score. In the studies realized by Gabalci (2008), Safarinejad (2006), Aydos et al. (2005) findings supporting the research result have been found (Gabalci 2008; Safarinejad 2006; Aydos et al 2005).

Conclusion

Sexuality have several complex biological, psychological and social elements. The methods which are used in order to prevent pregnancy could have negative effects on sexual functions. In this study was determined that they still use the withdrawal method as a traditional contraceptive method no negatively affects sexual life in women. It is determined that some of modern contraceptive methods partly negative effects on sexual life in women. It is important for the healthcare professionals to evaluate the individual through a well described sexual history and to personalize the use of contraceptive, to provide consultancy on the subject matter and to provide necessary orientations by taking the problem seriously when a negative effect is observed.

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References

Alici B. (2004). The anatomy of female genital tract. Female and men Sexual Health. (1.st). Istanbul: Turkish Society of Andrology.

Aydos M., Oner S., Acar B., Zeren A., Aydos S., Atahan 0. (2005). Factors that effect female sexual dysfunction frequency. European Urology, 4: 178.

Aygin D., Aslan F.E. (2005). The Turkish adaptation of the female sexual function index. Journal of Medical Sciences, 25:393-399.

Balci E., Ozturk A., Gun I., Ozturk Y. (2008). Evaluation of the complaints about the family-planning methods used by the women aged 15-49 in Talas/Kayseri. Journal of Health Sciences, 17: 54-62.

Berman J.R., Adhikari S.P., Goldstein, I. (2000). Anatomy and physiology of female sexual dysfunction and dysfunction: classification, evaluation and treatment options. European Urology, 38: 20-29.

Berkiten A., Aslan H. (2001). The family planning method effects on sexual life in women. Istanbul: 3.rd National Congress of Gynecology and Obstetrics Abstract Book, pp 13-16.

Biri A., Ozturk J., Budakoglu I., Maral I. (2002). The status contraceptive methods use of women and their husbands by education. Clinic Science & Doctor, 8: 838-842.

Cayan S., Bozlu M., Canpolat B., Akbay E. (2004). The assessment of sexual functions in women with male partners complaining of erectile dysfunction: does treatment of male sexual dysfunction improve female partner's sexual functions? Journal of Sex Marital Therapy, 30: 333-341.

Dilbaz B. (2005). IUD use in Turkey and in the World: from past to future. Ankara: IV. International Reproductive Health and Family Planning Congress, Abstract Book 20-23 April pp 84-88.

Ege E., Akın B., Aslan S.Y., Bilgili N. (2010). Prevalence and risk factors of female sexual dysfunction among health women. TUBAV Science, 3: 137-144.

Elnashar A.M., Ibrahim M.E., Desoky M.M., Ali O.M., and Hassan M.E. M. (2007). Female sexual dysfunction in lower Egypt. BJOG, 114: 201-206.

Ertop N.G., Altay B. (2012). Investigation of the effect on marital adjustment of family planning method used by married women aged between 15-49. Kirikkale University Facult of Medicine,14: 1-8.

Gabalci E., Terzioglu F. (2010). The effect of family planning methods used by women of reproductive age on their sexual life. Sexuality and Disability, 28: 275-285.

Guida M., Sardo A., Bramante S. and Sparice S. (2005). Effect of two types of hormonal contraception-oral versus intravaginal- on the sexual life of women and their partners. Human Reproduction, 20: 1100-1106.

Guvel S. (2003). Factors associated with sexual function in married women. Turkish Journal of Urology, 29: 43-48.

Karakoyunlu, F.B. (2007). The frequency of sexual dysfunction among married women. Akdeniz University Health Sciences Enstitute, Obstetric and Gynecological Nursing, Postgraduate Thesis. Antalya: Akdeniz University.

Li, R.H., Lo, S.S., The, D.K., Tong, N.C., Tsui, M.H., Cheung, K.B., et al. (2004). Impact of common contraceptive methods on quality of life and sexual function in Hong Kong Chinese women. Contraception, 70: 474-482.

Incesu, C. (2005). Sexual Dysfunction. Istanbul: Organon Medicine.

Martin-Loeches, M., Ort,i R.M., Monfort, M., Ortega, E. and Rius, J. (2003). A comparative analysis of the modification of sexual desire of users of oral hormonal contraceptive devices. The European Journal of Contraception and Reproductive Health Care, 8:129-134.

Mayda, S.A., Arslan, T., Bozkurt, H.B., Dedeli, İ. and Ozkan, O. (2005). The rate of family planning methods usage of 15-49 years old women living in Duzce permanent residences and the causes of prefering methods. TAV Preventive Medicine Bulletin, 4:265-279.

Raymond, C. and Rosen, D. (2002). Assesment of female sexual dysfunction: Rewiew of validated methots. Fertility and Sterility,77: 89-93.

Rosen, R., Brown, C., Heiman, J., Leiblum, S., Meston, C., and Shabsigh, R. et al. (2000). The female sexual function index (FSFI): a multidimensional self-report instrumnet for the assessment of female function. Journal of Sexual Marital Therapy, 26: 191-208.

Sabatini, R. and Cagiano, R. (2006). Comparison profiles of cycle control, side effects and sexual satisfaction of three hormonal contraceptive. Contraception, 74: 220-223.

Safarinejad, M.R. (2006). Female sexual dysfunction a population based study in Iran prevalence and associated risk factors. International Journal of Impotance Research,18: 382–395.

Salonia, A., Munarriz, R.M., Naspro, R., Nappi, R.E., Briganti, A., Chionna, R. et al. (2004). Women's sexual dysfunction: a pathophysiological review. BJU Int., 93: 1156-1164.

Sanders, S.A., Graham, C.A., Bass, J.L. and Bancroft, J. (2001). A prospective study of the effects of oral contraceptives on sexuality and well-being and their relationship to discontinuation. Contraception, 64: 51-58.

Shah, M.B. and Hoffstetter, S. (2010). Contraception and sexuality. Minerva Ginecol, 62: 331-347.

Sirin, A. and Soylemez, H. (2001). Health problems of married women aged 15–49. Journal of Istanbul University Florence Nightingale School of Nursing Bulletin, 6: 40-43.

Tokuc, B., Eskiocak, M., Ekuklu, G. and Saltık, A. (2005). Knowledge of 15-49 aged women living in the provincial Edirne about family planning methods and prevelance of contraceptive methods. STED,14: 8-14.

Turkey Demographic and Health Survey (TDHS). (2008). Ankara: T.C. Hacettepe University Institute of Populatıon Studies. Turkish State Planning Organization. eg: http://www.hips.hacettepe.edu.tr/eng/tdhs08/. (Accessed: March 2013).

Valadares, A.L., Pinto-Neto, A.M., Conde, D.M., Sousa, M.H., Osis, M.J. and Paiva, L.C. (2008). A Population-based study of dyspareunia in a cohort of middle-aged Brazilian women. Menopause, 15: 1184-1190.

Vural, E.Z. and Gonenc, I. (2011). Contraception and sexuality. Turkish Family Physician, 2: 21-23.

Wiegel, M., Meston, C. and Rosen, R. (2005). The female sexual function index (FSFI): cross validation and development of clinical cutoff scores. Journal of Sex & Marital Therapy, 31: 1-20.

World Health Organization. (2004). Defining sexual health. eg:
http://www.who.int/reproductivehealth/topics/sexual_health/sh_definitions/en/index.html (Accessed: October 2013).

Yanikkerem, E., Acar, H. and Elem, E. (2006). Withdrawal users' perceptions of and experience with contraceptive methods in Manisa, Turkey. Midwifery, 22: 274-284.