

Sexual Function Profile in Couples Using Withdrawal and Intrauterine Device Methods: A Comparative Analysis

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Abstract

Background: The sexual function of men and women is affected by many factors. One of these factors is the contraceptive method used. The aim of this study was to investigate the sexual function profile and male and female sexual function correlation in couples using intrauterine device (IUD) and withdrawal (WD) methods.

Methods: In this descriptive study, the sample consisted of 55 couples (55 women and 55 men=110 persons) living in a city in the Central Anatolia Region of Turkey between December 2015 and June 2016. The data were collected by the questionnaire form, male and female Premature Ejaculation Profile, The International Index of Erectile Function, and the Female Sexual Function Index. The data were analyzed with the descriptive statistics, Chi-square, t-test, Wilcoxon, Kappa, and Spearman's correlation test.

Results: Male and female Premature Ejaculation Profile was lower in couples using the WD method, and these couples had more problems with ejaculation ($P<0.001$). In couples with better male erectile functions, orgasm and sexual satisfaction were higher in both sexes. Premature ejaculation had a significant positive relationship with the sexual functions of females ($P<0.01$).

Conclusions: The results showed that there are problems associated with premature ejaculation in couples using WD; the sexual function of the couples might be related to the erectile function and premature ejaculation status of men rather than the method used.

Keywords: Couples, Male, Female, Sexuality, Contraception

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1. Introduction

As the basis for human reproduction, sexuality has deep spiritual and cultural connotations and several complex biological, psychological, and social elements (1, 2). However, female and male sexual functions are different from each other. The female sexual function consists of desire, arousal, orgasm, satisfaction, and pain (3). Male sexual function, on the other hand, is comprised of libido, erection, orgasm, satisfaction (4, 5), and ejaculation (6).

Many factors affect the sexual function of both men and women, one of which is related to contraceptive methods (7, 8). While these methods prevent unwanted pregnancies, they impact the sexual life of couples (9-13). Various studies have reported that the complex correlation between contraceptive methods and sexual function is influenced by multiple factors (14-16). It has been reported that contraceptive methods have different (positive, negative or neutral) effects on the sexual life of couples or individuals (11-14,17-19).

Globally, 63% of married or in-union women of reproductive age use certain forms of contraception, including any modern or traditional methods of contraception (10, 20). In Turkey, the most common method is the intrauterine device (IUD) while the traditional method is withdrawal (WD) (21).

Research on IUD is generally related to women. Some studies have indicated that IUD has positive effects on sexual function (11, 15, 22, 23) whereas others have found that IUD negatively affects the sexual function of women (24, 25). In a study, it was noted that IUD users experienced increased sexual pain, reduced orgasm, lubrication (wetness), and general sexual dysfunction (26). However, some studies have revealed that IUD has no significant effect on orgasm (27), libido (13), and sexual desire (11). On the other hand, several investigations have reported no difference in sexual function with the use of contraceptive methods (9, 17, 22, 28).

The WD method, also known as coitus interruptus

or the pull-out method, is the oldest known traditional family planning method used by couples in many communities (10, 20). It has been reported that WD might reduce the sexual satisfaction of both males and females due to the interruption of the intercourse, thereby negatively affecting the sexual life (15, 20). Withdrawal can lead to sexual dissatisfaction and psychological distress and anxiety, particularly in women, and reduction in the sexual pleasure and satisfaction of couples. In some studies, on the other hand, it was specified that withdrawal had no negative impact on sexual life (12, 19).

Contraceptive methods might have various influences on the sexual responses of both females and males, hence the necessity of understanding how contraceptive methods shape the sexual experiences or functions of couples. There is a lack of community-based data delineating the effect of contraceptive methods on male and female sexual functions. Furthermore, the majority of the studies related to contraception and sexuality are concerned with women, and men do not seem to have a major role. Also, there is limited research on couples.

2. Objectives

This study was conducted on couples using withdrawal and intrauterine device as common approaches to contraception. The objective was to investigate the correlation between male and female sexual function in couples using intrauterine device and withdrawal methods. The results of the study can serve as a guide for healthcare professionals and family planning consultants.

3. Methods

Design and Participants

With a descriptive and comparative design, this study was carried out on two groups in a city located in the Central Anatolia Region of Turkey. There are 12 Family Health Centers in the study area. Previous year data was related to women aged 15-49 years whose contraceptive methods were received from the Provincial Directorate of Health. The data determined which family health center in the study region had the highest number of WD and IUD users. The phone number and address of these individuals were obtained with the permission of the health directorate and the family health center (n=436). The users were called, briefly informed about the purpose of the study, and assessed in the context of sampling criteria. Afterwards, an appointment was requested for a home visit from those meeting the criteria. However, a total of 255 home visit appointments were made for reasons such as “not being reached, no acceptance, pregnancy, giving birth, menopause, and divorce”. 115 users were reached out of the total 255 home visit appointments due to reasons such as “not finding the registered address, absence on the appointment date/time decided on during the phone calls, and incorrect information”. Spouses (male) of some individuals who were reached during home visits did not agree to participate in the study (n=31) and some of the users withdrew from the study (n=29) because they did not want to respond due to the sexual content of the questions. As a result, the study was completed with a total of 55 couples (30 WD users and 25 IUD users) (55 women and 55 men=110 person) (Figure 1). Analyses of the study were performed based on couples using WD and IUD.

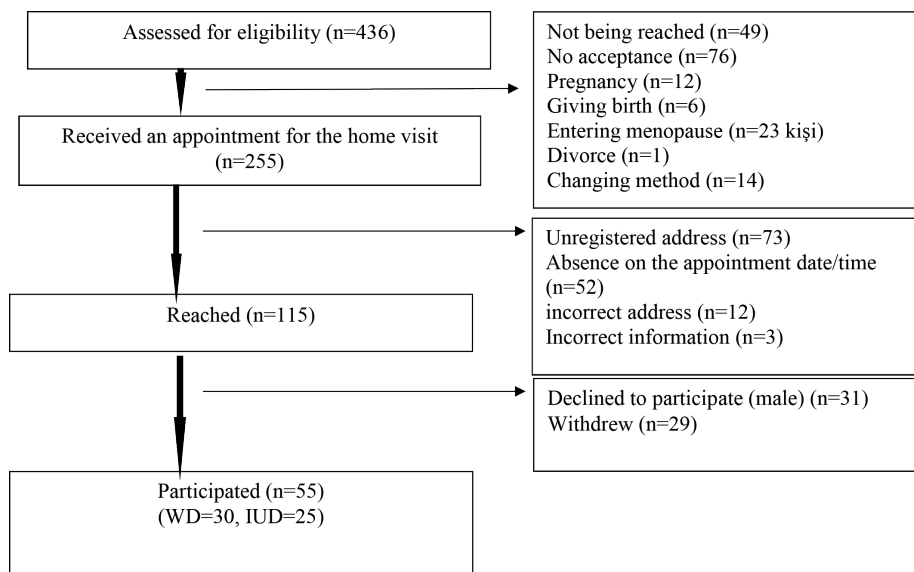


Figure 1: Flow chart of the participants during the study

The inclusion criteria were use of WD or IUD methods, females aged between 15 and 49 years, non-pregnant women, not having entered menopause, no recent birth giving, an active sexual life for at least four weeks, absence of conditions that could cause sexual dysfunctions (chronic disease, drug usage, cancer, cancer treatment, nervous system damage or diseases, pelvic trauma or surgery, gynecological surgery, mental illness, hyperprolactinemia, pituitary/hypothalamic disease, or tumor), and willingness to participate in the study.

The post hoc power analysis was performed by the independent sample t-test for the adequacy of the sample size and the reliability of the results between the two independent groups. Based on the significance level (α) of 0.05 and the effect size (d) of 0.50, the power of the study was calculated as 0.82.

Instruments

The data were collected with a questionnaire form, The Premature Ejaculation Profile (PEP), International Index of Erectile Function (IIEF) and Female Sexual Function Index (FSFI). The questionnaire form comprises a total of 11 questions regarding the socio-demographic and contraceptive methods for both females and males.

The Premature Ejaculation Profile (PEP) is used in observational studies on premature ejaculation (6, 29). Its Turkish validity study was conducted by Serefoglu and co-workers (30). PEP examines the state of premature ejaculation for males and females separately, and each form consists of four questions (perceived control over ejaculation, satisfaction with sexual intercourse, personal distress, and interpersonal difficulty related to ejaculation). Each question is scored based on a 5-point Likert scale (29, 30).

The International Index of Erectile Function (IIEF) was developed by Rosen and colleagues (4). Adapted to Turkish by the Turkish Society of Andrology Association, IIEF assesses sexual function over a four-week period prior to questionnaire completion. IIEF is comprised of 15 items under five domains, namely erectile function (EF), orgasmic function (OF), sexual desire (SD), intercourse satisfaction (IS), and overall satisfaction (OS) (4, 5). The domain of erectile function ranges from 6 to 30, and the optimal cut-off score is 25 (a score of ≤ 25 signifies erectile dysfunction-ED). ED severity is classified into five categories: no ED (EF score of 26-30), mild (EF score of 22-25), mild-to-

moderate (EF score of 17-21), moderate (EF score of 11-16), and severe (EF score of 6-10) (31).

The Female Sexual Function Index (FSFI) was developed by Rosen and colleagues (3). It consists of 19 questions evaluating six domains of sexual function: desire, arousal, lubrication, orgasm, satisfaction, and pain. The total score of the scale ranges from 2 to 36, indicating the general status of sexual function. The cut-off value of the scale is ≤ 26.55 . A total FSFI score of ≤ 26.55 means sexual dysfunction (32). The validity and reliability tests of FSFI were conducted in Turkey (33).

Data Collection

Data were collected with couple home visits by those who agreed to participate in the study. Interviews were conducted with the couples who have been planned home visit before and could be reached in the first visit. Second home visits for most of the couples were arranged based on their suitable times (17.00-19.00 pm on weekdays and 13.00-20.00 pm on weekends). At the beginning of the data collection process, some spouses (male) were not willing to be in an interview with a female researcher, in which case, a male nurse was recruited. The data were collected with face-to-face interviews of both partners at the same time but in different rooms. The duration of the interviews was approximately 30 minutes.

Data Analysis

Analyses of the study were performed based on couples using WD and IUD. The SPSS software version 20 was used to analyze the data. The differences between the couples using WD and IUD were analyzed using chi-square and independent t-test. The differences between males and females using WD and IUD regarding the mean scores of PEP index, IIEF, and FSFI scores (sub-scales and total) were examined by t-test. Spearman's Correlation test was employed to analyze the results of the sexual function correlation between the males and females.

4. Results

There was no difference between couples using WD and IUD methods in terms of average age (Female (F): $P=0.13$; Male (M): $P=0.15$), educational level (F: $P=0.32$; M: $P=0.98$), marriage duration ($P=0.06$), and duration of the method used ($P=0.66$). Pregnancy concerns in both genders of the couples using WD were higher (F: $P=0.008$; M: $P=0.04$), and the confidence level

(F: P<0.001; M: P=0.23) and satisfaction associated with the method was higher in couples using IUD (F: P=0.002; M: P=0.01) (Table 1).

No difference was detected between the couples using WD and IUD methods regarding male and female PEP scores related to “perceived control over ejaculation” (F: P=0.88; M: P=0.17) and “satisfaction with sexual intercourse” (F: P=0.30; M: P=0.41). Couples using WD method were observed to experience significantly more

problems in both genders concerning “personal distress and interpersonal difficulty related to ejaculation” (P<0.001), and male and female PEP index was lower in couples using WD method (P<0.001) (Table 2).

The average EF score was 27.16 (SD=3.21) for men using WD and 25.64 (SD=3.58) for men using IUD (P=0.09). Intercourse satisfaction score of the IIEF in male partners using IUD was better than those using WD (P=0.006). According to the cut-off values of the

Table 1: Characteristics and opinions of the couples using withdrawal methods (WD) and intrauterine device (IUD)

Characteristics and Opinions	Contraceptive Methods		*P value	
	WD (n=30 Couples)	IUD(n=25 Couples)		
	n(%)	n (%)		
Educational level (Female)				
5 years	24(80.0)	23(92.0)	0.32	
8-12 years	6(20.0)	2 (8.0)		
Educational level (Male)				
5 years	13 (43.3)	11(44.0)	0.98	
8-12 years	8(26.7)	7(28.0)		
>12 years(university)	9(30.0)	7(28.0)		
	Mean±SD	Mean±SD		
Average age				
Female	32.40±7.51	35.44±7.37	0.13	
Male	36.26±7.66	39.44±8.46	0.15	
Marriage duration of couples	13.70±8.77	18.20±8.50	0.06	
Duration of current use of the method//years	6.48±6.06	6.76±5.19	0.66	
Related to currently used method				
•Pregnancy anxieties (Min:1-Max:10)	Female	4.50±3.13	2.56±1.73	0.008
	Male	3.63±2.09	2.24±1.58	0.04
•Satisfaction level(Min:1-Max:10)	Female	6.20±2.94	8.44±1.82	0.002
	Male	6.53±2.99	8.32±1.67	0.01
•Confidence level(Min:1-Max:10)	Female	5.56±2.69	8.36±1.65	<0.001
	Male	7.20±2.84	8.00±1.84	0.23

*Chi-square and t-test were used.

Table 2: Premature Ejaculation Profile (PEP) scores and Premature Ejaculation Profile index of female and male individuals according to the contraceptive methods

PEP		Contraceptive methods		*P value
		WD(n=30 Couples)	IUD(n=25 Couples)	
		Mean±SD	Mean±SD	
•Perceived control over ejaculation	Female	3.43±1.33	2.48±0.96	0.88
	Male	3.63±0.80	2.28±1.10	0.17
•Satisfaction with sexual intercourse	Female	3.46±0.93	3.72±0.84	0.30
	Male	3.96±0.61	4.12±0.78	0.41
•Personal distress related to ejaculation	Female	2.13±1.07	3.76±0.87	<0.001
	Male	1.70±0.95	4.36±0.99	<0.001
•Interpersonal difficulty related to ejaculation	Female	1.73±1.01	4.20±0.86	<0.001
	Male	1.23 0.50	4.76±0.59	<0.001
PEP Index	Female	2.69±0.58	3.79±0.70	<0.001
	Male	2.63±0.36	4.13±0.66	<0.001

*t-test was used.

IIEF-5 (a score of ≤ 25 signifies ED), the total ED rate was found to be 29.1% (n=16), most of which was mild while there was no severe ED. There was no difference between the two methods as far as ED rate is concerned (P=0.30) (Table 3).

FSFI domain and total mean scores of the female partners using IUD were slightly higher than those using WD, but these differences were not significant (P=0.12) except for lubrication (P=0.05). Sexual dysfunction was observed in 52.7% (n=29) of the females, the majority of whom used WD (56.7%). However, this difference in terms of sexual dysfunction was not significant (P=0.52) (Table 4).

Based on the EF, PE, and FSFI scores, men with better erectile functions in couples using WD were specified

to have higher orgasmic function, sexual desire, overall satisfaction, and total IIEF scores (P<0.01-0.001); furthermore, better erectile functions resulted in significantly higher orgasmic functions and satisfaction in the female partners (P<0.05-0.01). Men with better erectile functions in couples using IUD had significantly better orgasmic function, intercourse satisfaction, and total IIEF scores (P<0.05-0.001); however, there was no significant correlation between the sexual functions of the women (P>0.05). There was a significant positive correlation between male PEP index and orgasmic function, intercourse satisfaction, and total IIEF scores of men in couples using IUD (P<0.05-0.01). There was a significant positive correlation between female PEP index and male erectile function, overall satisfaction, and total IIEF scores in couples using WD (P<0.05-0.01). A significant positive correlation was also found

Table 3: International Index of Erectile Function (IIEF) scores among male individuals according to the contraceptive methods

IIEF Domains	Contraceptive Methods		*P value	
	WD(n=30) Mean±SD	IUD(n=25) Mean±SD		
Erectile function (EF)	27.6±3.21	25.64±3.58	0.09	
Orgasmic function(OF)	9.16±1.20	8.92±1.46	0.49	
Sexual desire(SD)	7.93±1.38	7.40±1.50	0.17	
Intercourse satisfaction(IS)	11.13±1.92	12.44±1.32	0.006	
Overall satisfaction(OS)	8.53±1.22	8.76±1.09	0.47	
IIEF Total score	63.93±6.20	63.12±7.05	0.65	
According to IIEF-ED Cut-off	n(%)	n(%)	Total(N=55)	P value
ED (EF score of ≤ 25)	7(23.3)	9 (36.0)	16 (29.1)	0.30
No ED (EF score of 26 – 30 points)	23 (76.7)	16 (64.0)	39 (70.9)	
Severity of ED	n(%)	n(%)	n(%)	
Moderate	- (0.0)	1(4.0)	1(1.8)	0.58
Mild to moderate	3(10.0)	3(12.0)	6(10.9)	
Mild ED	4(13.3)	5(20.0)	9(16.4)	
No ED	23(76.7)	16(64.0)	39(70.9)	

*t-test and chi-square test were used.

Table 4: Female Sexual Function Index (FSFI) scores among female individuals according to the contraceptive methods

FSFI	Contraceptive Methods		*P value
	WD Mean±SD	IUD Mean±SD	
Desire(D)	3.62±0.97	3.81±0.86	0.43
Arousal(A)	3.66±1.31	4.09±1.01	0.18
Lubrication(L)	4.36±1.63	5.12±1.04	0.05
Orgasm(O)	3.79±1.59	4.24±1.21	0.24
Satisfaction(S)	4.16±1.35	4.48±1.08	0.34
Pain(P)	4.47±1.40	5.02±1.10	0.11
FSFI total	24.17±6.60	26.58±4.57	0.12
According to FSFI cut-off	n(%)	n(%)	Total
Sexual dysfunction (≤ 26.55)	17(56.7)	12(48.0)	29 (52.7)
Normal sexual function (>26.55)	13(43.3)	13(52.0)	26(42.3)
χ^2 , P	$\chi^2=0.41$, P=0.52		

*t-test and chi-square test were used.

Table 5: Male and female sexual function correlation results according to contraceptive methods

IIEF, PEP, FSFI	IIEF Domains															
	IIEF Domains						PEP index				FSFI Domains					
	EF	OF	SD	IS	OS	Total	Male	Female	D	A	L	O	S	P	Total	
	r	r	r	r	r	r	r	r	r	r	r	r	r	r	r	
EF	WD	1	0.49**	0.52**	0.09	0.48**	0.85***	0.18	0.52**	0.30	0.19	0.12	0.35*	0.47**	0.03	0.31
	IUD	1	0.77***	0.37	0.38*	0.36	0.89***	0.22	0.22	0.13	0.17	0.04	0.15	-0.07	0.12	0.09
OF	WD		1	0.41*	0.34	0.33	0.72***	0.12	0.14	-0.17	-0.26	-0.03	0.00	0.03	-0.02	-0.08
	IUD		1	0.48*	0.46*	0.42*	0.86***	0.43*	0.34	0.29	0.33	0.20	0.42*	0.23	0.20	0.38*
SD	WD			1	-0.15	0.24	0.57**	0.08	0.29	0.09	-0.04	0.00	0.16	0.09	-0.12	0.03
	IUD			1	0.43*	0.46*	0.66***	0.18	0.13	0.31	0.22	-0.04	0.28	0.00	-0.06	0.22
IS	WD				1	0.45*	0.48**	0.04	0.12	-0.10	0.19	0.21	0.23	0.18	0.37*	0.23
	IUD				1	0.33	0.63**	0.55**	0.18	0.37	0.29	0.48*	0.35	0.33	0.19	0.56**
OS	WD					1	0.70***	0.19	0.37*	0.09	0.14	0.21	0.24	0.32	0.28	0.27
	IUD					1	0.59**	0.31	0.24	0.05	0.05	0.01	0.46*	0.15	0.14	0.17
IIEF total	WD						1	0.19	0.47**	0.06	0.10	0.16	0.34	0.39*	0.15	0.28
	IUD						1	0.40*	0.28	0.27	0.27	0.14	0.35	0.09	0.15	0.30
PEP index Male (M)	WD							1	0.13	0.05	-0.04	-0.13	0.12	0.06	0.01	0.00
	IUD							1	0.26	0.39*	0.39*	0.48*	0.54**	0.33	0.56**	0.67***
PEP index Female (F)	WD								1	0.41*	0.51**	0.41*	0.64***	0.70***	0.33	0.64***
	IUD								1	0.42*	0.39*	0.40*	0.68***	0.49**	-0.17	0.48**

Spearman's correlation test was used; *P<0.05, **P<0.01, ***P<0.001

between male and female PEP index and FSFI domains and total scores in couples using IUD (P<0.05-0.001). On the other hand, a significant positive correlation existed between female PEP index and FSFI domains and total scores in couples using WD (P<0.05-0.001) (Table 5).

5. Discussion

Premature ejaculation (PE) is the most common male sexual function disorder (6), which is either congenital or acquired (34). There is no literature on the correlation and difference between PE and the contraceptive methods used by couples. In the present study, it was revealed that both males and females in couples using the WD method stated more problems regarding "personal stress and interpersonal difficulty related to ejaculation" compared to couples using IUD; moreover, male and female PEP index was lower in couples using WD method. WD is a method with high failure rates and its effectiveness depends on the willingness and ability of both men and women to do it right every single time. However, characteristics related to withdrawal method usage are a stressor for couples. The increase in ejaculation stress might negatively affect the control over ejaculation and the communication and sexual intercourse between couples.

ED is one of the two primary problems of male sexual health (35). In the literature, there is no study examining men's ED according to the used contraceptive method. In the present study, no difference was observed in terms

of male ED experience between WD and IUI users. However, there is a need for more studies in order to have an absolute and definite judgment. In the present research, the total ED rate was 29.1%, and the majority of men with ED had mild ED level. These results are compatible with the ED rates observed in the general population (36-38). Regarding erectile function, it was observed that EF mean score was 27.16 in men using the WD method and 25.64 in men using the IUD method; however, the difference was not statistically significant. There was no significant difference between WD and IUD users in terms of the EF; however, it was observed that the men using WD method had higher EF scores. This indicates that they had a higher self-confidence and were more successful in their erectile function; this confidence might be a factor for these couples to opt for the WD method. This result indicates that the WD method was selected by men with the self-confidence for sexual performance; however, this method reduced their intercourse satisfaction because it was based on their success and control while the IUD method increased their intercourse satisfaction due to its independence from sexual intercourse and men's responsibility. Also, based on the literature, the WD method may cause sexual dissatisfaction in men (18), which is in line with the present results.

The majority of studies on contraception and sexuality in the literature are related to female sexuality. In one study, positive results were obtained that related sexual function according to FSFI domains in women using IUD (39). In another study, the opposite was

reported (26). In a study by Higgins and co-workers (23), it was reported that the majority of women using IUD reported positive effects on sexuality. However, some studies reported that IUD negatively impacted women's sexual functions (24, 25), increasing the sexual pain and reducing orgasm, lubrication, and general sexual function (26). Other studies reported unchanged female sexual experiences (9, 17, 22), orgasmic functions, and sexual desire (11, 13, 27). Several studies reported that WD reduced sexual satisfaction and caused sexual dissatisfaction in women (18, 40) whereas others observed no negative effects on sexual function (12, 19). Fataneh and colleagues claimed that the mean scores of FSFI sexual satisfaction and satisfaction dimensions were higher in women using IUD compared to those using the WD method (15). In the current study, no significant difference between WD and IUD users was detected except for lubrication although the dimension mean scores of FSFI were higher in women using IUD. Women choosing WD method had a higher rate of sexual dysfunction, but the difference was not significant, which is similar to some studies (15, 18, 40). Sexual function may vary depending on different factors, hence the difference among the studies in the literature. According to our findings, it is possible that IUD have positive effects on women's sexual functions. In addition, even though there was no statistically significant difference between IUD and WD use and sexual function scores in the results, the score differences should not be ignored and it should not be claimed that WD did not affect women's sexual functions.

The present study further investigated how female and male sexual functions in couples affect each other according to the use of IUD and WD methods and whether they are correlated. Erectile function is a condition affecting both men and women's sexual experiences (41). The majority of men facing EF also experience PE issues. EF-associated performance anxiety might either develop or worsen PE (35, 41). ED and PE may further cause problems such as reduced sexual satisfaction in men and women (29). In the present study, it was determined that better EF in men using the WD method resulted in higher orgasmic functions, sexual desire, overall satisfaction, and total IIEF scores in the couples. Also, better EF in men resulted in significantly higher orgasm and satisfaction. In couples using IUD, better EF in men meant higher orgasmic functions, intercourse satisfaction, and total IIEF scores. The results suggest that male EF has an important role in sexual functions, especially orgasm and sexual satisfaction of both women and men

selecting the WD method, which is particularly based on men's erection and control over ejaculation.

A significant correlation was observed between the couple's satisfaction with sexual intercourse and the male control over ejaculation (6). It was also shown that ED or PE encountered in men might entail female sexual disorders and intercourse problems such as orgasm failure, hypoactive sexual desire, sexual intercourse avoidance, sexual arousal disorders, and vaginismus (42). In the present study, an important correlation was detected between the female sexual functions in couples using both IUD and WD and the male control over ejaculation (according to female PEP index). The higher the ejaculation control in men, the better the outcome of women's sexual functions will be. The study results showed that male and female sexual functions in couples had a positive correlation and the presence or absence of a problem in the male sexual functions affected the female sexual functions in the same way.

Importantly, the present study was conducted on couples and examined the sexuality of both genders. However, the biggest limitation of the study was the small number of its participants. As the present study was about sexuality, participants had difficulty in answering questions. The absence of any significant difference between IUD and WD and sexual function might be attributed to the small sample size. Furthermore, the couples were evaluated only once in the process of using these methods. Therefore, it is difficult to draw a conclusion based on the unclear background of these couples. Accordingly, there is a need for longitudinal studies with larger samples size, that monitoring their sexual functions as soon as the couples start using the contraceptive method.

6. Conclusions

The results of this study indicated how the sexual functions of couples are shaped according to the WD and IUD method used and also each other. According to the results, WD had no negative effects on men's erectile functions compared to couples using IUD. However, males in couples using WD had a lower PEP index, meaning there was a reduction in their control over ejaculation. The sexuality of the couples was associated with the EF and PEP status of the males. In couples with better male erectile functions, particularly orgasm and sexual satisfaction were higher in both males and females. PEP had a significant positive correlation with the sexual functions of females. Our

findings suggested that the sexual function of couples might be dependent on the male EF and PEP rather than the method used.

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Ethical Considerations

Necessary permissions were obtained from the Provincial Directorate of Health where the study was conducted. The study was approved by the Ethics Committee of Marmara University Health Sciences Institute. Verbal and written informed consents were obtained from the couples who volunteered to participate in the study.

Conflicts of Interest: The authors declared no conflict of interest.

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