Original Article

Insights Into the Vaginismus Treatment by Cognitive Behavioral Therapies: Correlation With Sexual Dysfunction Identified in Male Spouses of the Patients

Süleyman Eserdag; M.D.[1], Didem Kurban; M.D.[2], Emrah Yakut; M.D.[3], Prabhu Chandra Mishra; M.D.[4]

1 Department of Obstetrics and Gynecology, Faculty of Medicine, Altınbas University, Istanbul, Turkey
2 Private Clinic, Ankara, Turkey
3 Memorial Ankara Hospital, Ankara, Turkey
4 Stemmax Research and Therapeutics Private Limited, New Delhi, India

Received December 2020; Revised and accepted February 2020

Abstract

Objective: To examine retrospectively sexual dysfunction in the male spouses of 425 female patients who had presented to our clinic and were diagnosed with primary vaginismus.

Materials and methods: Seven questions related to age, profession, educational status, number of marriages, personality structure, sexual experience, and sexual dysfunction history were directed to the spouses of the 425 female patients presenting to our clinic for vaginismus treatment between 2015 and 2018. Men reporting sexual dysfunction were evaluated by a urologist, and the necessary treatment was initiated. Cognitive-behavioral couple therapy was started for all patients.

Results: Of the 425 men, 73.9% stated that they did not have any sexual problems. Of the 111 men (26.1%) stated that they had one or more sexual problems, 77 (18.1%) were diagnosed with premature ejaculation, 25 (5.8%) erectile dysfunction, 36 (8.4%) hypoactive sexual desire, and one (0.2%) had delayed ejaculation. Premature ejaculation and erectile dysfunction were identified in nine patients, premature ejaculation and hypoactive sexual desire in seven, and erectile dysfunction and hypoactive sexual desire in four patients. There was an increased rate of sexual dysfunction in men in cases where the duration of marriage without coitus was longer than three years.

Conclusion: In the treatment of vaginismus, male sexual dysfunction should not be ignored. Spouses should be questioned for sexual dysfunction and included in the treatment process.

Keywords: Vaginismus; Sexual Dysfunctions; Erectile Dysfunction

Introduction

Vaginismus is defined as the inability to achieve vaginal penetration or experiencing extreme pain in the course of penetration due to the continuous involuntary contraction of pelvic muscles in the outer 1/3 of the vagina during sexual intercourse (1). In patients with this condition, the vaginal muscles, which normally operate entirely under the woman's control, strongly contract during sexual intercourse

Correspondence:
Dr. Prabhu Chandra Mishra
Email: info@stemgenn.com

just before the penis enters the vagina, making penile penetration almost impossible (1,2).

According to the Diagnostic and Statistical Manual of Mental Disorders, fourth edition, text revision (DSM-IV-TR), vaginismus is a female sexual dysfunction (1). In the DSM 5 classification made by the American Psychiatric Association in 2013, together with dyspareunia, vaginismus was included in the category of 'genitopelvic pain and penetration disorders' (1). Vaginismus is, in fact, an anxiety disorder; therefore, it is also referred to as 'sexual phobia' or 'fear of sexual intercourse' by some sexologists (3).

The sexual problems of the partner, such as erectile dysfunction (ED), premature ejaculation (PE), and hypoactive sexual desire may be predisposing factors for vaginismus. Masters and Johnson investigated the causes of vaginismus and included male sexual dysfunction among them (4). However, male sexual dysfunction may also develop secondary to vaginismus (5). Kaplan reported that the reaction of the man to his wife's sexual dysfunction varies according to his psychological and sexual status (3). Since the man cannot experience vaginal penetration, he may be disappointed or perceive his wife's dysfunction as rejection (3). Kaplan also reported that the partners of women with vaginismus often develop impotence secondary to this condition (3).

ED refers to the difficulty of achieving an adequate erection to initiate or maintain any sexual activity (6). ED is defined by the Massachusetts Male Aging Study (MMAS) as the inability to create and maintain a penile erection that will provide penetration (6). It ranks first in men who present with sexual problems and is seen in 10-20% of the general adult male population. While ED is detected in 10% of men aged 30-39 years, its prevalence rises to 59% in the 70-79 age group (7).

Although PE is a common sexual dysfunction among men, it is usually not articulated, and thus remains untreated (8). Two-thirds of men may experience PE at any time in their lives. In 1970, Masters and Johnson defined PE as "a man's inability to delay ejaculation", which failed to bring the woman to orgasm in 50% of sexual relationships and cited it as a cause of female anorgasmia (4, 9). In the PE pharmacological treatment guidelines published in 2004, the American Urology Association described this condition as "ejaculation that occurs sooner than desired, either before or shortly after penetration, causing distress to either one or both partners" (10).

According to the results of observational studies, the prevalence of PE varies according to geographic localization and ethnicity. The Global Study of Sexual Attitudes and Behaviors (GSSAB) reported the prevalence of PE among men aged 40-80 years as 12% in the Middle East and 30% in Southeast Asia (11). The Turkish Andrology Association Male Sexual Dysfunction Study Group investigated the prevalence of PE subgroups for the first time in the world with a cross-sectional study (12). Later, the same research was repeated in China (13). In these two studies, the prevalence of PE was found to be 20% in Turkey and 25.8% in China. The rates of a lifetime acquired and variable PE was determined as 2.3%, 3.9%, and 8.5%, respectively for Turkey and 3%, 4.8%, and 11%, respectively for China (12, 13).

In this study, we aimed to examine sexual dysfunctions among the spouses of 425 female patients who presented to our clinic in Ankara which is specialized in the treatment of sexual dysfunction and was diagnosed with primary vaginismus.

Materials and methods

The study included 425 female patients that presented to our female sexual dysfunction clinic between 2015 and 2018 and were diagnosed with primary vaginismus based on sexual and medical history and pelvic examination, as well as their male spouses. Couples with psychiatric disorders, chronic diseases, or poor general health, and those under 18 years old were excluded from the study.

The female patients were asked to complete a questionnaire with 48 items prepared by the researchers, while men were required to respond to a seven-item questionnaire. The patients' questionnaire files were scanned retrospectively for the study.

First, the female patients were interviewed alone and directed eight questions related to demographic characteristics, such as age, occupation, educational status, etc.; 13 questions about marriage; seven questions about family structure and upbringing; three questions about their previous psychiatric diseases and general phobias; and 17 questions about sexual history (orgasm, sexual desire, myths, traumas, fears, etc.) and previous treatments. Then, the male spouses were interviewed alone and were asked seven questions inquiring about age, occupation, educational status, number of marriages, personality structure, sexual experience, and history of sexual dysfunction.

After the completion of the questionnaires, the female patients were placed on the gynecological examination table to determine the degree of

vaginismus according to the Lamont classification and it was decided whether there was an anatomical or hymenal problem by performing a hymen examination (14). Then, couple interviews were undertaken to inform them about the symptoms of the patient and vaginismus. All 425 patients were included in the cognitive and behavioral therapy program with their spouses.

All male participants describing sexual dysfunction were evaluated by a urologist. Diagnoses were made following the guidelines of the European Urology Association based on detailed medical and psychosexual history, two standard inquiry forms that questioned erection function (International Erectile Function Form - International Index of Erectile Function –IIEF and Sexual Health Assessment Form for Men - Sexual Health Inventory for Men - SHIM), physical examination findings, and laboratory and radiological examinations were required. Treatment for the sexual dysfunction was also planned if considered necessary.

Statistical analyses were performed using SPSS software program version 24.0. Descriptive statistics were expressed as median values for non-normally distributed variables. The chi-square or Fisher's exact test was used to compare categorical data while the Mann-Whitney U test was conducted for numerical variables. One-way ANOVA was undertaken to evaluate the relationship of sexual dysfunction with the duration of marriage by comparing the groups with and without sexual dysfunction. P values of <0.05 were considered statistically significant. Written informed consent was obtained from all participants. For this type of retrospective study, formal consent is not required from an ethics committee.

Results

The mean±SD age of 425 women that participated in the study was calculated as 28.4 ± 5.4 (age range 18-54) years and the mean±SD age of their spouses as 30.8 ± 5.8 (age range 20-62) years (Table 1). The mean duration of marriage was 18.2 months, ranging from four days to 15 years. The mean duration of the female patients' knowing their partners before marriage was 48 months, ranging from two months to 27 years. Of the couples, 88.8% stated that they decided to marry after dating, 10.6% had arranged marriages, and 0.6% eloped. Of the participants, 91.7% stated that they had no blood relation to their spouses (Table 2).

The female patients described their spouses as 'extremely understanding-patient ' (74.7%), 'nervous-angry' (10.6%), 'oppressive-conservative' (2.5%) and 'prone to violence' (1.9%). There was no other reported problem in marriage for 82.4% of women. When 425 men were questioned about their sexual experiences, 45.8% stated they had sexual experience, 38.5% did not have a sexual experience, 15.7% had very little sexual experience (one to four times). When the male spouses were questioned in terms of their sexual problems, 73.9% stated that they did not have any problem.

There were a total of 111 men that reported one or more sexual problems. After the evaluation of their sexual history by a urologist, 77 (26.1%) of these men were diagnosed with PE, 25 (5.8%) with ED, 36 (26.1%) with hypoactive sexual desire, and one with delayed ejaculation (0.2%).

Table 1: Demographic characteristics of the patients and their spouses

Characteristic		Female patients n (%)	Spouses n (%)
Age (years)	Mean age (±SD)	28.4 (±5.4)	30.8 (±5.8)
Educational level	Primary school	12 (2.5)	15 (3.5)
	Middle school	28 (6.4)	35 (8.2)
	High school	102 (23.8)	125 (29.3)
	University	207 (48.7)	193 (45.5)
	Master's degree	51(11.6)	37 (8.6)
	PhD	25 (5.8)	20 (4.6)
Occupation	Unemployed/housewife	159 (37.5)	4 (0.9)
	Worker	28 (6.6)	87 (20.6)
	Civil servant	118 (28.0)	154 (36.4)
	Self-employed	28 (6.4)	89 (20.4)
	Academician	5 (1.0)	4 (0.9)
	Private sector employee	87(20.3)	87 (20.6)
Country of residence	Turkey	386 (90.8)	
	Other countries	39 (9.1)	

SD: standard deviation.

Table 2: Marital characteristics of the couples

Characteristic		n (%)
Type of marriage	Dating	378(88.8)
	Arranged	44 (10.6)
	Eloping	3(0.6)
Duration of knowing the spouse (days) (months)	Median time (range)	1440.0 (60.0-9720.0) 48.0 (2.0-324.0)
Duration of marriage (days) (months)	Median time (range)	545.0 (4.0-8030.0) 18.2 (0.1-267.7)
Kin marriage	No	390 (91.7)
	Yes	12 (2.9)
	Distant	23 (5.4)
	To solve the sexual problem	402 (94.7)
Reason for presenting to the clinic	To have children	23(5.3)

The coexistence of PE and ED was seen in nine patients, PE and hypoactive sexual desire in seven patients, and ED and hypoactive sexual desire in four patients (Table 3).

Table 3: Psychological characteristics

Variable		n (%)
Type of personality	Oppressive-conservative	12 (2.5)
	Nervous-angry	51 (10.6)
	Extremely understanding-patient	361 (74.7)
	Prone to violence	9 (1.9)
Sexual experience	Absent	130 (38.5)
	Present	155 (45.8)
	Little	53 (15.7)
Sexual problems*	Absent	314 (73.9)
	Present	111 (26.1)
	Premature Ejaculation	77 (18.1)
	Erectile Dysfunction	25 (5.8)
	Hypoactive sexual desire	36 (8.4)
	Delayed Ejaculation	1 (0.2)

**Participants were allowed to select more than one option in this category

There was no significant difference between men with and without sexual problems in terms of their age, personality structure ('oppressive-conservative', 'nervous-angry', 'extremely understanding-patient', and 'prone to violence'), educational status, and sexual experience. However, although not statistically significant, it is noteworthy that of the men with ED, 57.1% stated that they had no sexual experience before marriage (Tables 4-5-6).

To examine the relationship of male sexual dysfunction with the duration of the marriage, the latter was divided into five groups as <1 year, 1.1-3 years, 3.1-5 years, 5.1-10 years, and >10 years. When the ratio of women with vaginismus to men with sexual dysfunction was compared between these groups, it was statistically significantly higher in the <1 year and 1.1-3 years groups than>3.1 years groups ($p<0.05$; ANOVA) (Table 7). This suggests that a marriage period of more than three years without coitus increased the incidence of male sexual dysfunction.

Table 4: Relationship between sexual experience and male sexual dysfunction

	Sexual Experience			p-value
	Absent	Very little	Present	
Male Sexual Dysfunction n (%)				
Absent	92 (39.1)	36 (15.3)	107 (45.5)	0.91
Present	38 (36.9)	17 (16.5)	48 (46.6)	
Erectile Dysfunction n (%)				
Absent	118 (37.2)	52 (16.4)	147 (46.4)	0.13
Present	12 (57.1)	1 (4.8)	8 (38.1)	
Premature ejaculation n (%)				
Absent	103 (38.9)	40 (15.1)	122 (46.0)	0.85
Present	27 (37.0)	13 (17.8)	33 (45.2)	
Hypoactive sexual desire n (%)				
Absent	121 (38.9)	48 (15.4)	142 (45.7)	0.82
Present	9 (33.3)	5 (18.5)	13 (58.1)	

Table 5: Relation between personality structure and male sexual dysfunction

	Male personality structure n (%)				P
	Oppressive-conservative	Nervous-angry	Extremely understanding-patient	Prone to violence	
Male Sexual Dysfunction n(%)					
Absent	9 (2.8)	39 (12.0)	268 (82.7)	8 (2.5)	0.91
Present	3 (2.8)	12 (11.0)	93 (85.3)	1 (0.9)	
Erectile Dysfunction n (%)					
Absent	12 (2.9)	47 (11.5)	341 (83.4)	9 (2.2)	0.62
Present	0 (0)	4 (16.7)	20 (83.3)	0 (0)	
Premature ejaculation n (%)					
Absent	11 (3.1)	44 (16.1)	293 (82.3)	8 (2.2)	0.60
Present	1 (1.3)	7 (9.1)	68 (88.3)	1 (1.3)	
Hypoactive sexual desire n (%)					
Absent	10 (2.5)	47 (11.6)	340 (83.7)	1 (1.2)	0.37
Present	2 (7.4)	4 (14.8)	21 (77.8)	0 (0)	

Discussion

The prevalence of vaginismus can vary greatly due to the studies on this subject being carried out in countries with different cultures. The prevalence of vaginismus is reported to be 3 to 13% in the general population and 21 to 48% among patients presenting to the clinic with sexual dysfunctions (15). In a study conducted in Iran, 8% of 300 married women that applied to a family planning clinic in Tehran were reported to have been diagnosed with vaginismus (16). Although reduced sexual desire is the most common sexual dysfunction among women evaluated by Western studies, vaginismus is one of the leading reasons for presenting to hospital among women with sexual problems in Eastern countries (17). Özdemir et al., who examined 449 couples in unconsummated marriages that applied to the Sexual Health Clinics in Istanbul, suggested that the most obvious cause of sexual dysfunction was vaginismus in 81% of cases, ED in 10.5%, and PE in 5%. The authors noted that the patients with the complaint of inability to achieve coitus constituted 24% of all cases that presented to their clinic (18).

In a study conducted in Italy, the authors examined 24 married couples that did not engage in coitus and found that in only five of the couples, the female partner had vaginismus. However, 62.5% of men stated that they lost penile rigidity during penetration and 37.5% never achieved adequate erection and experienced PE. This indicates that the male factor is more prominent in unconsummated marriages in Western countries (19). In the study conducted in Italy, 54% of the men mentioned that they had no previous sexual intercourse experience before marriage (19). This seems to be consistent with 57.1% of the men with ED in our study having no sexual intercourse before marriage (Table 3).

Table 6: Relation between educational status and male sexual dysfunction

	Male educational status n (%)			p-value
	Primary school and Middle school	High school	University Master's degree PhD	
Male Sexual Dysfunction n (%)				
Absent	36 (11.2)	93 (28.9)	193 (59.9)	0.85
Present	14 (13.0)	32 (29.6)	62 (57.4)	
Erectile Dysfunction n (%)				
Absent	49 (12.1)	118 (29.1)	239 (58.9)	0.48
Present	1 (4.2)	7 (29.2)	16 (66.7)	
Premature ejaculation n (%)				
Absent	103 (38.9)	40 (15.1)	122 (46.0)	0.85
Present	27 (37.0)	13 (17.8)	33 (45.2)	
Hypoactive sexual desire n (%)				
Absent	48 (11.9)	112 (27.8)	243 (60.3)	0.82
Present	2 (7.4)	13 (48.1)	12 (44.4)	

Table 7: Relation of male sexual dysfunction with the duration of marriage

Duration of unconsummated marriage years	Number of vaginismus women [n(%)]	Number of male spouses with sexual dysfunction (n=109) [n (%)]	The ratio of vaginismus women to male spouses with sexual dysfunction	p-value
≤1	234 (48.4)	34 (31.2)	6.88	0.01
1.1-3	152 (31.5)	41 (37.6)	3.70	
3.1-5	56 (11.6)	21 (19.3)	2.66	
5.1-10	25 (5.2)	8 (7.3)	3.12	
≤1	234 (48.4)	34 (31.2)	6.88	

In a previous study, it was found that the women that had a spouse with ED had higher female sexual dysfunction (FSD) scores compared to those with spouses that did not have this condition (20). In another study investigating the FSD prevalence of women with spouses having ED, while 55% of the women participating in the study complained about experiencing sexual dysfunction to a certain degree, 35% had more than one sexual function complaint (21). The most commonly mentioned problems were difficulty in having an orgasm and reduced sexual desire. The authors reported the presence of a vicious circle, in which sexual dysfunction in one of the spouses negatively affected the other, and thus it was emphasized that spouses with sexual dysfunction should be evaluated together. In such cases, some questions are not fully answered, the most important of which are; who developed the sexual dysfunction first and how the condition of one spouse affected the other (21). In another study, the prevalence of sexual problems, such as orgasmic dysfunction, vaginismus, dyspareunia, and reduced sexual interest was reported as 62% among the partners of men with ED (22). In the Female Experience of Men's Attitudes to Life Events and Sexuality (FEMALES) study, which compared the sexual experience of women with partners using PDE5 inhibitors to those with partners that did not use, the former were found to have better experiences related to sexual desire, arousal, and orgasm (23). This suggests that PDE5 inhibitors can be preferred in the treatment of couples suffering from sexual dysfunction. When their spouses develop ED, many women try to maintain their sexual relationships by adapting to new challenges through some changes to foreplay as part of their sexual experience. They achieve good sexual experience depending on their needs, sometimes through slow lovemaking. Thus, they maintain intimate relationships with themselves and their spouses without penetration. These findings show that medical treatment is not sufficient alone for clinicians who are seeking a therapeutic approach in the treatment of men with ED, and some practical suggestions regarding sexual intercourse would also be useful (24).

Humans engage in sexual intercourse for pleasure, as well as reproduction. Thus, both men and women must be satisfied in this relationship. With the discovery of female orgasm, PE started to be seen as a disorder that needed to be prevented to achieve female orgasm (25, 26). Recent studies indicate that there is a strong relationship between PE and sexual dissatisfaction in all couples. However, it is not clear whether PE is caused by insufficient ejaculation control, short ejaculation time, or the indirect effect of the man's fear of not being able to meet the needs of his partner (27). What is clear is that the fear of not being able to meet the sexual needs of the spouse worsens the situation, resulting in problems that even lead men to avoid a sexual relationship with their partners. Their spouse being uncomfortable with this condition is the most important reason for men with the complaint of PE to seek treatment. PE can cause loss of self-esteem in men, sexual dissatisfaction in them and their partner, avoiding sexuality, psychological problems, and impaired quality of life. Many studies have shown that women with spouses experiencing PE have significantly worse sexual function than women with sexually healthy spouses (28.29). In the partners of men with PE, the most common sexual problems were observed as arousal (55.2%) and orgasm (51.9%) disorders (28). Riley and Riley reported a high rate of PE (21.8%) among the partners of women with sexual problems (30). PE was identified in the spouses of 29.9% of women with sexual desire disorder, 42.7% of those with arousal and lubrication disorder, 47.8% of those with anorgasmia, and 51.5% of those who did not like engaging in sex (30). This may be due to the reflection of the sexual dysfunction in the woman or her inability to experience her desire, excitement, and satisfaction due to her partner's PE (28).

Doğan, who evaluated the spouses of 32 female patients with vaginismus in Turkey in 2008, reported that 56.2% of men had insufficient knowledge about sex (31). Similarly, in our study, we found that 54.2% of men had very little or no sexual experience (Table 3). The rate of sexual dysfunction in men was much higher in the study of Doğan (65.6%) compared to our study (26.1%). However, the most common sexual dysfunction of men was PE in both studies. In our study, while hypoactive sexual desire was the second most common and ED was the third most common sexual dysfunction, Doğan found similar rates for these two conditions (31).

In a study conducted with 57 couples with sexual dysfunction in Ankara, Sungur observed that the primary problem originated from the male partner in 25 couples and female partner in 32. The most common sexual dysfunction was ED (56%) among men and vaginismus (56%) among women, and 41% of the spouses of women with vaginismus developed PE (32).

Oktay and Tombul evaluated 200 vaginismus patients and their spouses in Turkey in 2003 and reported a similar rate of male sexual dysfunction to our study (33). In the previous study, among the 200 male spouses, the rate of those with the normal sexual function was 83.5%, the PE rate was 13%, and the ED rate was 3.5%, and in our study, these rates were 73.9%, 18.1%, and 5.8%, respectively. Additionally, we determined that 8.4% of the male spouses had hypoactive sexual desire, which was not investigated by Oktay and Tombul. In the previous study, the attitude of male spouses toward the vaginismus problem was reported as 'understanding' in 72.5% and 'very understanding' in 17% of patients (33). In our study, these rates were similar with 74.7% of female patients describing their spouses as 'extremely understanding-patient' (Table 3). Oktay and Tombul made the inference that male spouses behaved in a very understanding way to avoid confronting their sexual problems, and thereby prolonged marriage without coitus (33). Another claim about the spouses of women diagnosed with vaginismus is that women choose understanding, overly tolerant, passive, and unpretentious spouses in contrast to their dominant and authoritarian fathers (34,35,36). In many studies, consistent with our study, the spouses of women with vaginismus are said to have low sexual experience and are not sexually outgoing (37). When viewed from this perspective, it comes to mind that spouses mutually display avoidance behavior and have an implicit agreement not to pursue treatment without being consciously aware. This situation leads to delays in the presentation of couples to clinics for treatment. Many of these couples come to treatment after several years of marriage to only have children.

In this study, the mean of time from marriage to the presentation was 18.2 months, which is in line with the literature (Table 2). This duration was reported to be 26 months in a study conducted by Munasinghe et al. in Sri Lanka in 2004 (38) and 15 months by Doğan et al. in Turkey in 2008 (31). Recently, Eserdag demonstrated the importance of the gynecological examination prior to vaginismus treatments (39). In the current study, some of the unconsummated marriages were understood to have continued for up to 15 years. This long duration may be due to couples being embarrassed to share their problem with someone, waiting for the problem to resolve on its own, previous unsuccessful treatment attempts, not knowing that vaginismus is a curable condition, and not knowing the existence of specialized clinics on sexual problems or a combination of a few. On the other hand, male spouses being extremely tolerant, ignoring the problem, and thinking that their spouse will never be able to overcome this problem may have further delayed seeking professional support. In the Italian study, conducted with 24 couples in unconsummated marriages, females were found to persist in seeking professional support in 15 couples, this process was initiated by both men and women in six couples, and only three couples referred to the clinic as a result of the insistence of the male party (19).

Sungur reported that the duration of a sexual dysfunction problem exceeding three years increased the rate of experiencing marriage problems (32). Consistently, we also found that the period of unconsummated marriage longer than three years increased the rate of sexual dysfunction among the male spouses (Table 7).

The treatment of vaginismus before it progresses into a chronic problem reduces the possibility of developing secondary sexual problems, such as hypoactive sexual desire in couples, PE and ED in men, and psychiatric problems, such as anxiety and depression in both partners. Early treatment can prevent different sexual and psychiatric problems that may develop over time from damaging the marriage relationship. Considering the very high success rates in patients with treatment compliance, it is important to increase people's awareness of vaginismus and its curable nature and refer those experiencing associated

symptoms to clinics specialized in this field.

In unconsummated marriages, the role of the man is often neglected, and the failure to achieve successful coitus is mostly attributed to the woman. In line with the results of our study and similar studies mentioned above, during the evaluation and treatment of treating couples that do not engage in sexual activity, considering the equal role and importance of both genders will increase the success of treatment.

A much higher number of participating couples (425) were included in our study compared to similar studies in this subject. Another difference in our study is that we approach the female and male sexual dysfunctions from the perspective of clinicians, unlike the studies mostly conducted by psychiatrists on this subject.

The limitation of the present study is the lack of long-term follow-up of the couples' sexual health. We ended the treatment and follow-up after couples had successful sexual intercourse. We don't know whether sexual dysfunctions recur in men later in the relationship. Long-term follow-up may help determine whether the primary cause of unconsummated is male, female, or both.

Conclusion

In conclusion, the spouses of women presenting to the clinic with vaginismus should be examined well. It should be kept in mind that men may develop sexual function disorders secondary to their partners' vaginismus or independent of this condition. Even if there is no sexual dysfunction, the reaction of the man to the condition of the woman should be evaluated, and it should be considered that this reaction may adversely affect the treatment process. To solve the problem of unconsummated marriage, male partners should be included in the therapy process, and additional treatments should be applied to those with sexual dysfunction.

Acknowledgments

Authors have no conflict of interests.

References

1. American Psychiatric Association. Diagnostic and Statistical Manual of Mental Disorders (DSM-5®). 5th edition Virginia: American Psychiatric Publishing, 2013.
2. Butcher J. ABC of Sexual Health: Female Sexual Problems II: Sexual Pain and Sexual Fears. BMJ 1999; 318: 110-2.
3. Kaplan HS. The New Sex Therapy: Active Treatment of Sexual Dysfunctions. New York: 1th edition, Routledge, 1974.
4. 4. Masters WH, Johnson VE. Human Sexual Inadequacy. Little Brown: Boston, 1970.
5. Anğın AD, Gün İ, Sakin Ö, Çıkman MS, Eserdağ S, Anğın P. Effects of predisposing factors on the success and treatment period in vaginismus. JBRA Assist Reprod 2020; 24: 180-8.
6. Feldman HA, Goldstein I, Hatzichristou DG, Krane RJ, Mc Kinlay JB. Impotence and its medical and psychosocial correlates: results of the Massachusetts Male Aging Study. JUrol 1994; 151: 54- 61.
7. Hehemann MC, Kashanian JA. Can lifestyle modification affect men's erectile function? Transl Androl Urol. 2016; 5:187-94.
8. Gillman N, Gillman M. Premature Ejaculation: Aetiology and Treatment Strategies. Med Sci (Basel) 2019; 7: 102.
9. Master VA, Turek PJ. Ejaculatory physiology and dysfunction. Urol Clin North Am 2001; 28: 363-75.
10. Montague DK, Jarow J, Broderick GA, Dmochowski RR, Heaton JP, Lue TF, et al. AUA guideline on the pharmacologic management of premature ejaculation. J Urol 2004; 172: 290–4.
11. Park HJ, Park JK, Park K, Lee SW, Kim SW, Yang DY, et al. Prevalence of premature ejaculation in young and middle-aged men in Korea: a multicenter internet-based survey from the Korean Andrological Society. Asian J Androl 2010; 12: 880-9.
12. Serefoglu EC, Yaman O, Cayan S, Asci R, Orhan I, Usta MF, et al. The comparison of premature ejaculation assessment questionnaires and their sensitivity for the four premature ejaculation syndromes: results from the Turkish Society of Andrology Sexual Health Survey. J Sex Med 2011; 8: 1177–85.
13. Gao J, Zhang X, Su P, Liu J, Xia L, Yang J, et al. Prevalence and factors associated with the complaint of premature ejaculation and the four premature ejaculation syndromes: A large observational study in China. J Sex Med 2013; 10: 1874–81.
14. Lamont JA. Vaginismus: a reflex response out of control. Contemporary Obstetrics and Gynecology 1994; 3: 30-2.
15. Ohl LE. Essentials of female sexual dysfunction from a sex therapy perspective. Urol Nurs 2007; 27: 57-63.
16. Shokrollahi P, Mirmohamadi M, Mehrabi F, Babaei G. Prevalence of sexual dysfunction in women seeking services at family planning centers in Tehran. J Sex Marital Ther 1999; 25: 211-5.
17. Bachmann G. Female sexuality and sexual dysfunction: Are we stuck on the learning curve? J Sex Med 2006;

3: 639-45.
18. Ozdemir O, Simsek F, Ozkardes S, Incesu C, Karakoç B. The unconsummated marriage: its frequency and clinical characteristics in a sexual dysfunction clinic. J Sex Marital Ther 2008; 34: 268-79.
19. Michetti PM, Silvaggi M, Fabrizi A, Tartaglia, Rossi R, Simonelli C. Unconsummated marriage: can it still be considered a consequence of vaginismus? Int J Impot Res 2014; 26: 28-30.
20. Cayan S, Bozlu M, Canpolat B, Akbay E. 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? J Sex Marital Ther 2004; 30: 333–41.
21. Greenstein A, Abramov L, Matzkin H, Chen J. Sexual dysfunction in women partners of men with erectile dysfunction. Int J Impot Res 2006; 18: 44–46.
22. Renshaw D. Coping with an impotent husband. Illinois Medical Journal 1981; 159, 29–33
23. Fisher WA, Rosen RC, Eardley I, Sand M, Goldstein I. Sexual experience of female partners of men with erectile dysfunction: The female experience of men's attitudes to life events and sexuality (FEMALES) study. J Sex Med 2005; 2: 675–84.
24. Conaglen HM, Conaglen JV. The impact of erectile dysfunction on female partners: a qualitative investigation. Sexual and Relationship Therapy 2008; 23: 147–56.
25. Efe E. Erkek Cinsel İşlev Bozukluklarının Partnerinin Cinsel Yaşamı Üzerine Etkileri. The Effects of Male Sexual Dysfunctions on Partner's Sexual. LifeTürkiye Klinikleri 2015; 8:62-6.
26. Şimşek A, Kandemir E. Prematür ejakülasyona güncel bakış ve tedavisindeki yenilikler. Current view of premature ejaculation and innovations in its treatment (Review). Androloji Bülteni 2014; 16: 1-7.
27. Burri A, Giuliano F, McMahon C, Porst H. Female partner's perception of premature ejaculation and its impact on relationship breakups, relationship quality, and sexual satisfaction. J Sex Med 2014; 11: 2243–55.
28. Hobbs K, Symonds T, Abraham L, May K, Morris MF. Sexual dysfunction in partners of men with premature ejaculation Int J Impot Res 2008; 20: 512-7.
29. Hartmann U, Schedlowski M, Krüger TH. Cognitive and partner-related factors in rapid ejaculation: Differences between dysfunctional and functional men. World J Urol 2005; 23: 93–101.
30. Riley A, Riley E. Premature ejaculation: presentation and associations. An audit of patients. Int J Clin Pract 2005; 59: 1482–7.
31. Dogan S, Dogan M. The frequency of sexual dysfunctions in male partners of women with vaginismus in a Turkish sample. Int J Impot Res 2008; 20: 218-21.
32. Sungur M. Evaluation of couples referred to a sexual dysfunction unit and prognostic factors in sexual and marital therapy. J Sex Marital Ther 1994; 9:251-65.
33. Oktay M, Tombul K. Two hundred cases of vaginismus: The patients, and their husband's psychological evaluation. New Symposium 2003; 41:115–9.
34. Reissing ED, Binik, YM, Khalifé, S. Does vaginismus exist? A critical review of the literature. J Nerv Ment Dis 1999; 187: 261-74.
35. Davis HJ, Reissing ED. Relationship adjustment and dyadic interaction in couples with sexual pain disorders: A critical review of the literature.Sexual and Relationship Therapy 2007; 22: 245-54.
36. Turan Ş, Usta Sağlam NG, Bakay H, Gökler ME. Levels of Depression and Anxiety, Sexual Functions, and Affective Temperaments in Women with Lifelong Vaginismus and Their Male Partners. J Sex Med 2020; 17: 2434-45.
37. Lahaie MA, Boyer SC, Amsel R, Khalifé S, Binik YM. Vaginismus: a review of the literature on the classification/diagnosis, etiology and treatment. Womens Health (Lond) 2010; 6: 705-19.
38. Munasinghe T, Goonaratna C, de Silva P. Couple characteristics and outcome of therapy in vaginismus. Ceylon Med J 2004; 49: 54–7.
39. Eserdağ S, Anğın AD. Importance of gynecological assessment for the treatment of vaginismus as a predictive value. J Obstet Gynaecol Res 2020.

Citation: Eserdag S, Kurban D, Yakut E, Mishra PC. **Insights Into the Vaginismus Treatment by Cognitive Behavioral Therapies: Correlation With Sexual Dysfunction Identified in Male Spouses of the Patients.** J Fam Reprod Health 2021; 15(1): 61-9.