The prevalence of sexual dysfunctions in infertile women

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ABSTRACT

- **Objective:** Sexuality is an important and integral part of every woman's life. The aim of this study was to assess the degree of sexual dysfunction among infertile women and its correlation with age, duration of marriage and etiology of infertility in women.
- **Materials and Methods:** 300 infertile women who were referred to IVF center for management of their infertility problem involved in this study after informed consent. They were asked to fill a questionnaire that contained three parts of demographic, infertility and sexual function items. Distribution of sexual dysfunction and its relationship to infertility and marriage duration were analyzed through SPSS software.
- **Results:** The most common sexual dysfunction was orgasm disorder (83.76%) and the rate of sexual desire disorder, dyspareunia and vaginismus were 80.7%, 67.7% and 76.7% respectively. More than 50% of cases mentioned decreased frequency of coitus after diagnosis of infertility. Vaginismus and dyspareunia were more common in 20-24 years age group.
- **Conclusion:** According to the high rate of sexual dysfunction in this study and almost the same rate in other studies, gynecologists should pay more attention to this important issue and encourage the patients to have an evaluation by a psychiatrist or psychologist

Keywords: Sexual dysfunction, infertility.

The sexual response cycle in women is mediated by the complex interplay of psychological, environmental, and physiologic (hormonal, vascular, muscular, and neurological) factors. The initial phase of the sexual response cycle is interest and desire, followed by the four successive phases originally described by Masters and Johnson: arousal, plateau, orgasm, and resolution (1).

Types of sexual disorders that are more common in women include: a) sexual desire disorders b) sexual arousal disorders c) orgasmic

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disorders d) sexual pain disorders (vaginismus, dyspareunia) (2, 3).

There is a complex association between sexual behavior and infertility. Sexual dysfunction can cause a delay in conception, but can also be the result of not conceiving. The greatest chance of conception is achieved through sexual intercourse on multiple occasions during the fertile period (4).

Infertility may be the result of sexual problems. Therefore, infertility examination should include an evaluation of couple's sexual behavior (5, 6).

In many cases, all infertility treatments have to be stopped and psychological aid has to be offered for sexual dysfunction (7).

Infertile women are likely to suffer from numerous psychosexual problems. Elstein has described the infertile couples as potentially having abnormalities of sexual function. Such abnormalities

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Table1. The prevalence of sexual problems in infertile women.

	Ν	%	
	300		
Libido			
No	242	80.7	
Yes	58	19.3	
Achieving orgasm			
No	251	83.7	
Yes	49	16.3	
Sexual arousal			
No	75	25	
Yes	225	75	
Vaginismus			
No	70	23.3	
Yes	230	76.7	
Dyspareunia			
No	97	32.3	
Yes	203	67.7	

may have a cause and effect relationship with infertility, or they may be incidental to infertility, or they may be presented in the disguise of infertility (8).

Some studies on sexual problems of infertile couples are available in the literature (9, 10, 11).

The objective of this study was to assess the degree of sexual dysfunction among infertile women and its correlation with age, duration of marriage and etiology of infertility in women.

MATERIALS AND METHODS

Female partners of 300 consecutive infertile couples were attended in this study from January to October 2006. Permission to perform this study was obtained from the ethics board of the committee of Yazd Research and Clinical Center for Infertility. The subjects volunteered as participants after the purpose of this study and the degree of the participation was explained to them, and then consents were signed.

All of the educated women filled the questionnaires by themselves and the rest of them (illiterate women) were interviewed by the first author personally. The questions of the questionnaire were grouped as follows:

1. Infertility status such as duration of marriage and infertility, type of infertility and personal data such as the age of the couple.

2. Sexual history such as frequency of intercourse, problems of desire, arousal and orgasm phases.

3. Past history such as referring to the psychiatrist previously.

Finally, the data were analyzed statistically with the aid of SPSS and chi-square test. The differences were considered to be statistically significant if P-value was<0.05.

RESULTS

All women welcomed this detailed questioning about sexual problems and co-operated well.

The mean age of women and men were 27.93 ± 4.8 and 33.48 ± 5.6 years respectively. The duration of marriage and infertility were 7.56 ± 4.3 and 5.42 ± 3.2 years respectively. The type of infertility was 81% primary and 19% secondary. The etiology of infertility was 40% male factor, 44.3% female factor, 7.7% unknown and 8% mixed factors.

The prevalence of the sexual problems has been shown in Table 1.

58.3% of women and men mentioned a reduction in sexual desire after infertility diagnosis while 10.3% of women and 18.7% of men had an increase in sexual desire after infertility diagnosis.

In this study, the mode of intercourse frequency per week was 2 times. The intercourse frequency had reduced in 54% of women and had increased in 5.3% after infertility diagnosis.

There was a significant difference between libido, achieving orgasm, dyspareunia and vaginismus with the age of women. (Table2).

In addition, Table 3 showed that the prevalence of vaginismus and dyspareunia has reduced with increasing duration of marriage.

There was no significant difference between sexual problems and etiology of infertility (Pvalue=0.2) 85% of women hadn't referred to the psychiatrist because of sexual problems in this research.

	20-24year	25-29year	>30year	P-value
Total of patients	75	127	98	0.009
Libido				
No	60 (80%)	104 (81.9%)	78 (79.6%)	
Yes	15 (20%)	23 (18.1%)	20 (20.4%)	
Achieving orgasm				0.049
No	59(78.7%)	103(81.1%)	89(90.8%)	
Yes	16(21.3%)	24(18.9%)	9(9.2%)	
Dyspareunia				0.014
No	14(18.7%)	46(36.2%)	37(37.8%)	
Yes	61(81.3%)	81(63.8%)	61(62.6%)	
Vaginismus				0.028
No	57(76%)	29(22.8%)	23(23.5%)	
Yes	18(24%)	98(77.2)	75(76.5%)	

DISCUSSION

Infertility may interact with a woman's sexual expression by causing or exacerbating sexual problems as a consequence of the diagnosis, investigation and treatment of infertility. Conversely, sexual problems may contribute in infertility. However, it is important to bear in mind that a sexual problem is a disorder only if the women perceives it to be so, with impaired sexual desire as the most common presentation (12).

In our study, the most common sexual problems in infertile females were anorgasmia (83.7%) and decreased libido (80.7%) while Jindal et al (1996) with evaluation of 200 Indian infertile women showed that decreased frequency of intercourse and anorgasmia were the most common problems identified (13).

Table 3. The association between vaginismus and dyspareunia with duration of marriage.

	<8year	>8year	P-value
Dyspareunia			0.02
No	42(26.9%)	55(38.2%)	
Yes	114(73.1%)	89(61.8%)	
Vaginismus			0.04
No	36(23.1%)	110(76.4%)	
Yes	120(76.9%)	34(23.6%)	

The prevalence of difficulty with sexual arousal, dyspareunia were 25% and 67.7% respectively while Audu's study (2002) on 97 Nigerian infertile women showed that the prevalence of difficulty with sexual arousal and dyspareunia was 20.6% and 57.7% respectively (14).

Jain and associates (2000) have indicated that sexual problems in infertile women consisting of dyspareunia, decreased libido, and orgasmic failure were the most common problems in their study (15).

In our previous study on fertile women, 30% of patients didn't have sexual desire. 26.1% weren't able to achieve orgasm and 17.1% had problem with sexual arousal. Also, 47.1% and 23.5% had dyspareunia and vaginismus respectively (16).In recent study, the prevalence of all sexual problems has increased in infertile women with comparison to fertile women.

Ponholzer et al (2005) showed that the prevalence of pain disorders were more frequent in women aged 20-39 years. Also, in their study, the prevalence of female sexual dysfunction increased with increasing age of women (17). In our study, the prevalence of pain disorders such as vaginismus and dyspareunia were more in women aged 20-24 years than the other groups.

Ramazanzadeh et al (2006) concluded that sexual desire and frequency of coitus has reduced in 200 male partners of infertile couples after infertility diagnosis (18) while our results indicated that sexual desire and frequency of coitus in infertile women has reduced significantly after infertility diagnosis.

In this study, only 15% of patients had been referred to the psychiatrist because of sexual problems. Despite the importance of these issues to their health care, many women find it difficult to talk to the physicians about sexual concerns, and many physicians are uncomfortable discussing sexual issues with their patients (19).

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