

Effect of Overactive bladder syndrome on female sexual function

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Abstract: Female sexual function is a very important and often neglected area of research. Therefore, the purpose of this study was to assess the relationship between overactive bladder syndrome and female sexual function. The study was conducted at Urological Outpatient clinic and Obstetrics and Gynecological clinic at Benha University Hospital. The design of this study was a descriptive research design. A purposive sample included 70 sexually active women diagnosed with overactive bladder syndrome were recruited in the study. Three instruments were utilized for data collection, interviewing questionnaire sheet, Female sexual function Index (FSFI) and Overactive Bladder Symptoms score (OABSS). The results of the study showed that there was highly statistical significant correlation between overactive bladder syndrome and female sexual function. **Conclusion:** highly statistical significant correlation was found between overactive bladder syndrome and female sexual function at 5% level of statistical significance. Therefore, it was recommended that this study should be conducted on a large number of sample.

Key words: Female sexual function, women with overactive bladder syndrome.

Introduction

Sexuality is an important and integral part of every woman's life, and in fact female sexual dysfunction can lead to personal distress and anxiety. Under the term "female sexual dysfunction" is included a variety of disorders associated with components of sexual function such as sexual desire, arousal and orgasm and pain related to sexual intercourse as well (Castagna & Montorsi and Salonia 2015).

Despite the importance of a healthy sex life to most people, research suggests that sexual dysfunction is common. Female sexual dysfunction (FSD) can occur at any stage of life, It may be lifelong or acquired; situation-specific or generalized; and mild, moderate, or severe based on the degree of distress it causes to the woman. The etiology is multifactorial (Kingsberg, et al, 2017).

In general, factors that can contribute to its development may be psychogenic, physical and mixed. Each of these factors consists of individual components that influence the sexual

response; However their precise impact in FSD development and progression is unknown (Holly, et al, 2016). Moreover, the effect of Overactive bladder syndrome on the development and progression of FSD has been poorly investigated. Overactive bladder (OAB) is defined as frequent urination with or without an urge of incontinence and it is usually associated with frequency and nocturia in the absence of infection or other pathological conditions. It is a common and distressing medical condition that can severely affect patient's quality of life (Gardikou, et al, 2013).

Subjects and Method

Study design:

A descriptive design was utilized for the conduction of this study.

Setting:

The study was conducted at Urological Outpatient clinic and Obstetrics and

Gynecological clinic at Benha University Hospital.

Subjects:

- **Sample Type:** A purposive sample.
- **Sample Size:** all available women during time of data collection from the previous mentioned setting were included in the study (n=70).

Inclusion criteria of the study were:

Married, sexually active women, Diagnosed with overactive bladder syndrome and willing to participate in the study.

Exclusion criteria of the study were:

Pregnant and lactating women, Have medical disorders such as diabetes, uterus prolapsed and uterine inversion, take medication overactive bladder syndrome

Instruments:

Three instruments were used for collecting data:

Instrument one: An interviewing questionnaire Sheet: It was designed by the researcher after reviewing the related literature.

Instrument two: Female Sexual Function Index (FSFI), it was developed by Rosen 2000 to assess the key dimensions of sexual function in women . This questionnaire consists of 19 questions that assess sexual function over the past 4 weeks and yield domain scores in six areas: sexual desire, arousal, lubrication, orgasm, satisfaction, and pain (Filipa,etal,2017).

Instrument three: Overactive Bladder Symptoms (O.A.B): it was developed by Homma 2006: It is self-assessment questionnaire consisting of 4 questions (daytime frequency, nighttime frequency, urgency, and urge

incontinence) assessing OAB symptoms. Women responded to each question about their bladder symptoms during the previous week. The OABSS provides an overall composite score, as well as individual scores.

Results

Table 1 describes the social characteristics of the studied women. It illustrated that the mean age of the studied women was 24.18 ± 8.785 and about 41.4% of them were more than 50 years. More than one quarter (28.6%) of women had primary or preparatory education. Nearly two thirds (61.4%) of them were housewives. In addition, more than half of the studied women lived in extended family and were from rural areas (65.7% & 54.3%) respectively.

Table 2 illustrates that more than one half (55.7%) of the studied women were multigravida from 4-6 times with mean number (3.80 ± 1.098) .More than two thirds (67.1%) of them were multipara with mean number (2.97 ± 0.833). Less than three quarters (72.9%) had normal delivery. Most of them , (81.4% & 70.0%) respectively had a history of abortion and complication during labor.

Table 3 illustrates the studied women's sexual function index domains. The majority mean and stander deviation was the lubrication domain (10.9714 & 4.83037 respectively), while the minority was desire domain (5.4000 & 2.39202).

Table 4 demonstrates that, there was highly statistically significant relation between female sexual function and personal characteristics among the studied women

Table 5 reveals negative association, that interpreted the highly over active bladder symptoms was associated with low female sexual function.

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Table (1): Social characteristics of the studied women (n= 70).

Variable	No	%
Age / years		
< 30	16	22.9
30 - 50	25	35.7
> 50	29	41.4
Mean \pm SD	24.18 \pm 8.785	
Educational level		
Illiterate	18	25.7
Primary or Preparatory	20	28.6
Secondary	14	20.0
University	18	25.7
Residence		
Rural	38	54.3
Urban	32	45.7
Employment		
Employed	27	38.6
House wife	43	61.4
Family type		
Extended	46	65.7
Nuclear	24	34.3

Table (2): Distribution of the studied women according to obstetrical characteristics (n=70).

Obstetrical characteristics	No	%
Number of gravidity		
1-3	28	40.0
4-6	39	55.7
7-9	3	4.3
Mean \pm SD	3.80 \pm 1.09	
Number of parity		
1-3	21	30.0
4-6	47	67.1
7-9	2	2.9
Mean \pm SD	2.97 \pm 0.83	
Previous abortion		
Yes	57	81.4
No	13	18.6
Mode of delivery		
Vaginal	51	72.9
Cesarean section	19	27.1
Complication during labor		
Yes	49	70.0
No	21	30.0

Table (3): Distribution of the studied women to their Female Sexual Function Index Score.

Item	Minimum	Maximum	%	Mean \pm SD
Desire	2.00	10.00	54	5.40 \pm 2.39
Arousal	4	20	53.8	10.76 \pm 4.76
Lubrication	4.00	20.00	54.85	10.97 \pm 4.83
Orgasm	3.00	15.00	54.48	8.17 \pm 3.43
Satisfaction	3.00	15.00	53.4	8.01 \pm 3.56
Pain	3.00	15.00	54.06	8.11 \pm 3.60
Total	19.00	95.00	54.12	51.43 \pm 22.079

Table (4): Relation between Total Female sexual Function Index score and Sociodemographic characteristics' of the studied women (n=70).

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Variable	Mean ±SD	Statistical test		P value
		F test	T test	
Age / years				
< 30	71.43±22.06	11.91		<0.001**
30 - 50	48.84±19.04			
> 50	42.62±17.73			
Education Level				
Illiterate	33.38±13.22	11.09		<0.001**
Primary or Preparatory	47.60±17.72			
Secondary	62.00±23.68			
University	65.50±18.98			
Residence				
Rural	44.73±20.07		2.88	<0.001**
Urban	59.37±22.00			
Employment				
Employed	62.85±20.27		3.73	<0.001**
House wife	44.25±20.24			
Family type				
Extended	45.45±20.80		3.39	<0.001**
Nuclear	62.87±20.18			

NB: High Significant relation at level of (P- value <0.001).

Table (5): Correlation between total sexual health and total score of symptoms of overactive bladder of the studied women (n=70).

Variables	Overactive bladder symptoms	
	r	P value
Sexual function	-0.205	0.089

Discussion

Overactive bladder syndrome is a common and annoying complication worldwide. OAB has abroad adverse impact on female sexuality in sexually active women. Overactive bladder women have much greater prevalence of sexual dysfunction than those who are not. Many studies reported that sexual dysfunction is the major, albeit multifaceted, issue that negatively impact on women quality of life (Corcos, et al, 2017).

The present study aimed to assess the effect of overactive bladder syndrome on female sexual function. The aim was achieved through answering the research question of the present study which was: Is the overactive bladder syndrome affect women's sexual function?

Regarding women's demographic characteristics, the finding of the present study revealed that less than half of the studied women aged more than 50 years with mean age of (24.18±8.785) year. More than one quarter had primary or preparatory education, nearly two thirds were housewives. In addition, more than half of the studied women live in extended family and from rural areas. This could be due to elderly women differ from their younger counterparts by the presence of several physiologic changes in the urinary tract, as well as the presence of concomitant morbidity and polypharmacy and Pelvic floor strength is reduced and levatorani is increased in older women. Moreover, increasing the level of education can improve of overactive bladder syndrome and help women to seek medical advice and

treatment and women from rural areas most times derived from medical services.

This findings were supported by Muzaffer et al, (2018) who reported that overactive bladder prevalence increases with age and reaches a maximal level around the age of 50, The mean age of the subjects was 26.47 ± 4.8 years, 23.1% of the study subjects had concluded primary education and the majority of their studied women were housewives.

On the other hand Naser Eldeen (2011) disagree with the current findings, who revealed that the mean age was estimated to be 39.3 ± 10.6 years, and the prevalence of overactive bladder increases in middle age women ranges from 41-45 years and there were no significant association between the family status and the total overactive bladder scores.

As regards mean score of female sexual function index, the results of the present study revealed that the mean and SD was (51.43 ± 22.079) with the majority mean and SD was the lubrication domain (10.97 ± 4.83), while the minority was desire domain (5.40 ± 2.39) and showed impaired function in all domains (desire, arousal, lubrication, orgasm, satisfaction, and pain) but arousal was the most sexual problem.

This finding was supported by Fecsm, et al, (2014) Who noticed that mean and SD of the total FSFI score was 54.53 ± 22.68 The majority mean and SD was the lubrication domain (10.08 ± 4.43), while the minority was desire domain (4.08 ± 1.43).

On the other hand, this finding was in contrary with El Atrash et al, (2014) who found that the majority of the subject study reported low sexual desire. Also, contradicated by Mostafa et al, (2017) who found that pain was the most common sexual problem among

Egyptian women suffering from urinary tract disorder.

As regards age of the studied women, the results of the present study revealed that female sexual dysfunction was more likely to be in older age more than 50 years. The impact of age on women's sexual function and sexuality could be associated with premenopausal and menopausal status, which is followed by a significant decrease in estrogen levels, which is associated with a weakening sex drive. Also, older women are more likely to have vaginal atrophy and more prone to suffer from sexual dysfunctions as a result of vaginal dryness and dyspareunia

This finding was supported by Anis, et al, (2014) who found that more than one half of the studied sample were in older age had female sexual dysfunction.

On the other hand, this finding was in converse with Sungur, et al, (2014) who found that the prevalence of low sexual function associated with distress in middle-age women

In relation to educational level, the results of the present study revealed that the majority of the studied women were illiterate with mean and SD (33.38 ± 13.22), housewife, lived in extended family and from rural areas. This results may be due to women who were highly educated (university and secondary school education) done more visits to outpatient clinics and insisted on getting cured and had normal life than do the women with less education.

This finding was in the same line with Asadi, et al, (2014) who found that more than two thirds of the studied subjects with female sexual dysfunction were illiterate with mean and SD (34.23 ± 7.62), housewife, lived in extended family and from rural areas.

On the other hand Joseph & Rees (2013) disagree with the present study, and

found that more than half of the studied women with female sexual dysfunction had secondary education with mean and SD (22.23±5.62), working and live in nuclear family.

Regarding the characteristics of the obstetric history of the studied women the present study revealed that more than half were multiparous, delivered vaginally, had history of abortion and complications during labor.

This finding was supported by Manal & Mahmoud (2016) who found the majority of the studied subjects were multiparous, had obstructed labor and experienced complications.

Concerning relation between total female sexual function index and total score of symptoms of overactive bladder symptoms, the present study findings revealed a significant negative association, this finding may interpret that the highly over active bladder symptoms was associated with low sexual function.

This finding was supported by Melotti, et al, (2017) who revealed that women with scores indicating severe overactive bladder had worse sexual function, mainly in the arousal, lubrication, orgasm, pain, and total domains.

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