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Sexual problems in Tehran: Prevalence and associated factors

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Abstract:

INTRODUCTION: Sexual dysfunctions are considered as the most prevalent problems in the general population and their prevalence is so dispersed depending on different cultures and living conditions. This research investigates the prevalence of sexual dysfunctions and their relevant factors in Tehran.

MATERIALS AND METHODS: In this cross-sectional questionnaire-based study, 1129 women and men referring to health centers in 22 Districts of Tehran were selected using quota, stratified and cluster sampling. Demographic questionnaire, female sexual function index (FSFI), and Brief Sexual Function Inventory (BSFI) were used to collecting data.

DATA ANALYSIS: The data were analyzed using descriptive methods, and the findings were compared using the Chi-square, analysis of variance, and independent *t*-tests.

RESULTS: Totally 561 women and 568 men with the average ages of 33/06 and 34/98 participated in this study. In general, 77/6% of women and 35/6% of men complained about sexual problems. The most prevalent problems in women were sexual desire dysfunction (45/3%) and arousal dysfunction (38/85%), and the most prevalent problems in men were erection dysfunction (40/4%) and then ejaculation dysfunction (32/5%). Prevalence rates of dysfunctions of orgasm, dyspareunia, and vaginal dryness were, respectively, 9/2%, 9/0%, and 7/0%, and prevalence of sexual drive dysfunction in men was 10/6%.

CONCLUSION: The prevalence of sexual problems in Iranian women is so much higher than the global findings, and in men, this rate is somewhat higher than global prevalence. This difference can be due to the culture and the chosen silence about sexuality and specially women's sexuality in the Iranian culture that requires extra attention to this area.

Keywords:

Prevalence, risk factors, sexual dysfunctions, sexual problems

Introduction

Sexual problems and dysfunctions are among the most common problems in the general population, and population studies show that >40% of women and 30% of men report some form of sexual problems.[1-6] It is estimated that between 25% and 64% of women and 10%–25% of men in Iran suffer from these problems.[7]

In a general perspective, sexual performance is the result of complex interaction of neuromuscular and hormonal agents affected by biological characteristics, interpersonal relationships, and cultural, traditional, and social properties.[8] Normal sexual performance is about sexual activity passing through the sexual stages from arousal to resolution without any problem and accompanied by the feelings of joy, fulfillment, and satisfaction.[9] Psychological and physiological changes in the human sexual response cycle cause sexual problems and dysfunction.[10] The term "sexual problems" refers to more general phenomena about low sexual performance cases, in which no specific symptom of personal distress is observed. The term "sexual disorder" refers to the cases, in which personal distress and low sexual

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performance are observed.[11] Both sexual problems and dysfunctions affect well-being, mental health, quality of life, and overall life satisfaction.[12,13] Sexual dysfunction is a term describing a clinical diagnosis by using the Diagnostic and Statistical Manual of Mental Disorders, Fifth Edition.[14] Moreover, for all sexual dysfunctions in DSM-5, diagnosis criteria should exist at least for 6 months in 75%–100% of cases.[10] Evaluation of individuals by using questionnaires, especially the questionnaires investigating sexual performance over the past 1 month can only determine sexual problems. Some studies have suggested that using the term dysfunction for referring to findings of questionnaires should be avoided; what is questioned in most epidemiologic studies mainly determines sexual problems rather than indicating the prevalence of sexual dysfunctions.[11] However, there is no general agreement about this claim.

Prevalence refers to the ratio of the population having a specific condition at a specific time.[15] Over the past two decades, investigations of sexual life epidemiology in the adult population have had a sudden increase. Nevertheless, only a few of these studies have been concentrated on a wider range of sexual problems and both genders.[16] Furthermore, married and single people have not been investigated separately and less specific attention has been paid to married people.

Based on the WHO (2006) report on the definition of sexual health, few epidemiological studies have been published in developing countries in this subject,[17] and since then, the growth of these studies in these countries has been less than that conducted in the United States and Europe. The prevalence of sexual problems is different from country to country concerning culture, race, and health variables. Health planners, who intend to reduce the risk of harmful sexual behavior, should be aware of the cultural structure of their area and the prevalence and epidemiology of sexual dysfunctions and problems.

In a country like Iran, talking and conducting research about sexual issues and problems encounter several problems, and people pay substantial expenses for this selected silence. Evaluating sexual dysfunction and research on the general health and well-being crisis related to sexual health is an important and noteworthy issue. Epidemiological data provide information that can be effective in planning services and preventive measures and identifying vulnerable groups, postulating hypotheses about underlying factors, and providing information that challenges existing knowledge regarding sexual behavior and dysfunction.[18] However, this criticism is true for epidemiological studies that they focus more on services planning and try to medicalize the problem and promote pharmaceutical marketing and advertising services.[18]

In the world, the epidemiological studies on male sexual disorders are minimal, but information on women's sexual disorders is even less.[1] In Iran, however, most studies have been conducted on women, and the studies on men are minimal.[19] This issue can indicate that stating sexual problems for Iranian men is stressful, and according to a mythical false belief: a man without sexual ability is not a perfect man. Therefore, researchers are more comfortable in researching women's sexual issues.[19]

By reviewing studies conducted worldwide, we found significant discrepancies in the findings, and so far, there were no precise estimates for the prevalence of sexual dysfunctions.[20] Besides the different research methods and the tools used in various studies, even in extensive research such as global study of sexual attitude and behaviors[3] with 27,500 women and men aged 40–80 in 29 different countries, which was representative of many areas of the world,[2,21-23] we see different prevalence rates that show the role of culture and different living conditions in sexual problems. Table 1 provides an overview of studies conducted worldwide. As shown in Table, there are a lot of statistics for the prevalence of sexual problems, and the diversity of the findings calls for conducting regional studies in a specific time interval.

Up to now, three review articles have been published on the prevalence of sexual dysfunctions in Iran. In 2007, Basirnia *et al*. investigated the prevalence in the general population,[7] and Ramezani *et al*., in 2008, examined the prevalence of the sexual dysfunction in people with severe medical conditions.[33] In 2016, Nasehi *et al*. reviewed 23 qualified studies, most of which were about women (20 studies on women and 1 study on women and men) and only two studies were exclusively about men. The result was that in Iran the overall reported prevalence rates of female sexual dysfunctions was 19/2%–77%, female sexual desire dysfunction 15.4%–65.8%, female sexual arousal dysfunctions 9.88%–88.3%, lubrication dysfunctions 11.9%–71.4%, pain dysfunction 9%–95.9%, orgasmic problems 10.5%–76%, and dissatisfaction 2.4%–78.5%. In the case of men, due to the lack of studies, only reports of three studies were presented without any conclusion. The results of these three studies included total prevalence rate of male sexual disorders of 80.8% in one study, the sexual desire dysfunction of 4.7% and 57%, erectile dysfunction of 18.6%, 22.7%, and 27%, and ejaculation dysfunction of 39.3% and 43.4%.[19]

Studies have also mentioned correlates of sexual problems and dysfunctions. Of these correlates, we can refer to age,[20,25,37,40,49,50,60,81-86] education,[37,40,49,81,87] having children,[37,49,81,88] number of children,[81] duration of marriage,[34,49,81,89] age difference with spouse,[81] length of marriage,[37] and the contraceptive methods.[37,49]

Table 1: The prevalence of sexual dysfunctions in different parts of the world

	America (%)	Europe (%)	Africa (%)	Australia (%)	Asia (%)	Iran (%)
Total prevalence of women's sexual problems	7-50[24,25]	28[20]	53.3-63[26,27]	65.5-70[28, 29]	25.8-43.4[5,6,30]	19.2-77[27,31-37]
Women's sexual desire problems	33-41[1,38-40]	19-45.7[41-45]	8.3-61.5[26,46]	16-55[29,47]		15.4-65.8[19,31,37,48,49]
Women's arousal and lubrication problems	21-21.5[1,40]	49[50]	5.4[26]	28[29]	12.7-60.9[51]	Arousal=6.7-88.3 Vaginal moisture=11.9-71.4[19,31,37,48,49]
Women's orgasmic problem	10[52]	15.5-30[43, 45]	63.6-72.4[26,46]	28.6[29]	16.4-59.1[51]	5-76[19,31,37,48,49]
Women's sexual pain		2-15.5[45,53,54]	6-68.1[26, 46, 55]	1-20.3[29,56]	5-67.8[51,57]	9-95.5[19,31,37,48,49]
Total prevalence of men's sexual problems	31[1]			50.0[28,29]		10-25[7,19]
Erection problems	15.5-52[40, 58]	2-50[45,59-61]	19.8-64.9[62,63]	9.5-61[29,64,65]	1-66.7[59,66-75]	10-27[19,48,76-78]
Ejaculation problems	26.2[40]	23.7[45]		23.8[29]	12-40[75,79,80]	1-43.4[19,48,76,77]
Men's sexual desire problems		6-41[45,53]		24.9[29]		4.7-57[48,76,77]

This research was conducted with regard to the fact that there has been no study investigating the general population, covering both men and women, only focusing on married men and women in the youth age, i.e., the peak sexuality period, also with regard to the fact that sexual behavior and performance have a significant effect on the quality of personal and marital life, and regarding the necessity of updated regional information for future planning. In this research, the prevalence of sexual problems is investigated with regard to both married men and women in the general population of Tehran (Iran).

Materials and Methods

Study type and participants

This research is a cross-sectional study, based on the general population from 1129 participants (561 women and 568 men) in the city of Tehran (Iran). The samples were people referred to the health centers of 22 Districts of Tehran from March 2016 to July 2017.

The inclusion criteria included married people, aged 18–50 years, and at least 1 year passed of their marriage. The exclusion criteria included pregnancy or lactation (and pregnancy or lactation of wife for men), menopause (and menopause of wife for men), history of surgery or problem in the genital area, having physical or psychiatric illnesses, taking medications that interfere with sexual function (based on the self-report), and using drugs or alcohol (according to the self-report).

Sample selection

At first, one health center was randomly selected from each district of Tehran, and from each center, a maximum of 54 samples completed the questionnaires. The assistant researcher at the health center explained the study method to all eligible participants who referred to the center, assured them of the confidentiality and anonymity of the study results, and invited them to participate in the study. Eventually, the response rate was 42%, which was not unexpected regarding the sensitivity of the study subject. This research was done with the ethics code of (IR. USWR. REC.1396.248) received from the ethics committee of the University of Social Welfare and Rehabilitation Sciences.

Study tools

Demographic characteristics questionnaire, the brief sexual function inventory (BSFI), and the female sexual functioning index (FSFI) were used to collecting data.

Brief sexual function inventory

Brief Sexual Function Inventory (BSFI) is a short self-report questionnaire developed by O'Leary *et al*. to assess the current performance of men. It takes between 5 and 10 min to be completed.[90] The questionnaire consists of 11 questions scored based on the 5-point Likert-type scale, with five subscales of sexual drive (two questions), erectile function (three questions), ejaculation function (two questions), overall problem assessment, and satisfaction with sexual function (one question). Sexual drive and ejaculation are scored between 0 and 8, erection and evaluation of the general problem are scored between 0 and 12, and overall satisfaction is separately scored between 0 and 4. The maximum total score of BSFI is 40, which is the sum of the first 10 questions.[90] The internal consistency coefficient of this scale was reported as between 0.62 and 0.95 calculated with Cronbach's alpha. Furthermore, its internal consistency was 0.79–0.90.[90]

Because of the multi-dimensionality of sexual function, O'Leary did not recommend cutoff point for BSFI. On this scale, lower scores showed worse performance.[9] A study in Norway calculated *Z* scores for BSFI using normal data collected from a clinical specimen of 1185 participants from the Norwegian population aged

20–79 and then published these *Z* scores for different age groups and in the current study, regarding the lack of Iranian normative data, these scores were criteria for being assigned in the group with the sexual problem.[9]

Female sexual function index

Female Sexual Function Index (FSFI) has 19 questions designed by Rosen *et al*. and is a standard tool for assessing the main dimensions of female sexual function over the past 4 weeks. These dimensions include sexual desire, sexual arousal, lubrication, orgasm, sexual satisfaction, and sexual pain. The range of sexual desire scores is between 1.2 and 6, and the score for the remaining dimensions is between 0 and 6. The whole score range is between 2 and 36, which the higher scores mean better sexual performance, and the cutoff point for sexual dysfunction is 28.[91] FSFI has shown an acceptable test–retest reliability (r = 0.75–0.86) and excellent internal consistency for the total score and the subscales (Cronbach's alpha is 0.89–0.95).[92] By doing sensitivity analysis, Mohammadi *et al*. found that a score of 26.55 or lower indicates the presence of sexual dysfunction in Iranian women. In addition, the validity and reliability of the Persian version of the questionnaire have been approved with calculating the Cronbach's alpha ($f \geq 0.7$).[93] The cutoff points considered for female sexual disorders in Iran are as follows: sexual desire, 3.3; sexual arousal, 3.4, vaginal moisture, 3.7; sexual pain, 3.8; orgasm, 3.4; and sexual satisfaction, 3.8.[94]

Demographic characteristics questionnaire

In this researcher-made questionnaire, the samples were asked about gender, age, spouse age, duration of the marriage, academic status, number of children, method of contraception, and satisfaction with the contraceptive method.

Data analysis

In this research, descriptive statistics (mean, standard deviation [SD], and frequency percentage) were used to describe the data collected for reporting the prevalence of dysfunctions. Furthermore, one of the research goals was comparing the groups and investigating the significance of the difference between the groups. As the data were in the form of frequency and categorical data and classified in two or several categories,[95] Chi-square test of independence was used for investigating the significance. Furthermore, regarding the categorical or parametric quantitative nature of the data, Chi-square test of independence and independent *t*-test were used for investigating the relationship between consequences and risk factors in the two groups including the participants with and without disorder. The collected data were analyzed using the SPSS version 21 software (SPSS, Chicago, IL, USA).

Results

Characteristics of the population studied

A total of 1129 participants (561 women and 568 men) aged 19–50 years participated in this study. The mean (SD) age of women was 33.66 (6.34) years, and the mean (SD) age of men was 34.98 (6.18) years. Table 2 presents the age distribution of the samples, and Tables 3 and 4 present the demographic characteristics of the groups with and without problems in men and women. For the whole sample, most of the subjects had a bachelor's degree, often had children, and used two methods of natural and mechanical contraception. Almost all of the participants were dissatisfied with their contraception method. The mean (SD) duration of marriage was 9.30 (6.90) years in women, and it was 8.90 (6.63) years in men. The average (SD) age difference between the husband and wife in women was 4.28 (3.97) years, and it was 3.48 (3.32) years in men. The average (SD) number of children of female samples was 1.04 (0.90), and it was 0.97 (0.92) for male samples. With regard to the type of data, participants with and without problem were compared in terms of demographic features by using the Chi-square test of independence and independent *t*-test. Tables 3 and 4 present the results. Among the women, age, duration of the marriage, having child, number of children, and satisfaction with contraception methods were significantly different in the groups of subjects with and without the disorder. Among men, only the variables of having a child and number of children were significantly different in the groups of participants with and without disorder.

Prevalence of sexual problems

The total score of the sample indicates that generally, 77.6% of women and 35.6% of men have reported sexual problems.

The most commonly observed problem in women was sexual desire dysfunction, which 243 (45.3%) reported that. Then, there was sexual arousal dysfunction in 206 (38.8%) participants, orgasmic dysfunctions in 49 (9.2%) participants, sexual pain in 48 (9.0%) participants, and the lubrication dysfunction in 37 (0.7%) participants.

The most commonly encountered problem in men was erectile dysfunction, which 218 (40.4%) participants reported that. Then, there were problems with ejaculation

Table 2: Age distribution of the samples

	Women		Men	
	n (%)	Mean (SD)	*n* (%)	Mean (SD)
19-30 years	227 (40.5)	27.08 (0.17)	155 (27.3)	27.91 (0.16)
31-40 years	273 (48.7)	35.39 (0.18)	319 (56.2)	35.41 (0.16)
41-50 years	61 (10.9)	44.90 (0.37)	94 (16.5)	45.23 (0.30)
Total	561	33.06 (6.34)	568	34.98 (6.18)

SD=Standard deviation

Table 3: Demographic characteristics of the female samples

	Women with problems (*n*=398)	Women without problems (*n*=115)	Significance of difference between groups
Age, years	32.46 (0.32)	34.70 (0.57)	*T*=−3.366, significant=0.001*
Education			χ^2=4.200, df=3, significant=0.24
Under diploma	11 (3.0)	8 (7.3)	
High school diploma	78 (21.1)	21 (19.1)	
Bachelor's degree	183 (49.6)	52 (47.3)	
Higher education	97 (26.3)	29 (26.4)	
No data	82 (14.6)		
Marriage duration, years	8.38 (6.62)	11.77 (7.11)	*T*=−4.434, df=452, significant=0.000*
No data	59 (11.5)		
Age difference of couples, years	4.16 (3.94)	4.24 (4.10)	*T*=−0.160, df=473, significant=0.873
No data	38 (7.40)		
Having children			χ^2=11.70, df=1, significant=0.001*
Yes	222 (64.7)	85 (82.5)	
No	121 (35.3)	18 (17.5)	
No data	115 (20.5)		
Number of children	0.95 (0.90)	1.28 (0.88)	*T*=−3.09, df=409, significant=0.002**
No data	102 (19.88%)		
Contraception method			χ^2=5.651, df=5, significant=0.342
None	22 (6.0)	4 (3.7)	
Natural	172 (46.9)	49 (45.4)	
Mechanical	137 (37.3)	41 (38.0)	
Pills	15 (4.1)	9 (8.3)	
Several methods	6 (1.6)	0 (0.0)	
Surgery	15 (4.1)	5 (4.6)	
No data	86 (15.3)		
Satisfaction from contraception method			
Satisfied	23 (6.1)	13 (11.8)	χ^2=4.033, df=1, significant=0.045***
Unsatisfied	353 (93.9)	97 (88.2)	
No data	75 (13.4%)		

Data are presented as mean (SD) or *n* (%). *The difference is significant at the level of 0.001, **The difference is significant at the level of 0.01, ***The difference is significant at the level of 0.05. SD=Standard deviation

dysfunction in 174 (32.25%) participants, and sexual derive problem in 57 (10.6%) participants.

Table 5 shows the prevalence rates of sexual problems in the samples separated by age groups in men and women whose scores were lower than the determined cutoff point were specified by using frequency and frequency percentage, and Chi-square test suggested a significant difference between the age groups. The results suggest that the women's sexual desire, erection, and total score of men increase with the increase of age. Table 6 presents mean and SD of BSFI and FSFI questionnaires for each separate group of the studied sample.

Discussion

Sexual problems and dysfunctions have a significant impact on the quality of life, interpersonal relationships, and personal feelings about oneself. People with these problems have concerns about their physical function, emotions, and social relations.[37] However, there is a strong tendency to ignore them and in some cases, sexual problems are considered to be caused by other problems and focus on nonsexual problems.

Literature review estimated the prevalence of female sexual problems between 7% and 50% in the general population. However, the prevalence rate in studies in different regions of Iran is higher and ranges from 19% to 70%. The findings of this study suggest that 77.6% of married women aged 18–50 years in Tehran have some sexual problem, and this rate is significantly higher than the global rate. In another study conducted in Iran, a close rate (77%) has been reported.[19] One of the reasons for the higher rate of sexual problems in Tehran is considering a lower cutoff point in women's sexual function questionnaire. Mohammadi *et al*. obtained a cutoff point of 26.5 as an appropriate score for the Iranian women's population,[93] whereas the global cutoff score is 28. By considering the global cutoff point of 28 in this study, the prevalence is still 77.9% and above the global prevalence.

Table 4: Demographic characteristics of male samples

	Men with problems (*n*=186)	Men without problems (*n*=337)	Significance of difference between groups
Age, years	34.23 (6.19)	35.26 (6.3)	*T*=−1.847, df=521, significant=0.065
Education			
Under diploma	7 (4.5)	10 (3.2)	χ^2=4.674, df=3, significant=0.197
High school diploma	46 (29.9)	77 (24.8)	
Bachelor's degree	72 (46.8)	138 (44.5)	
Higher education	29 (18.8)	85 (27.4)	
No data	104 (18.3)		
Marriage duration, years	8.24 (6.38)	9.06 (6.48)	*T*=−1.230, df=419, significant=0.219
No data	102 (19.59)		
Age difference between couples, years	3.20 (3.29)	3.72 (3.31)	*T*=−1.601, df=453, significant=0.110
No data	68 (13.00)		
Having children			χ^2=4.533, df=1, significant=0.03**
Yes	100 (58.5)	210 (68.2)	
No	71 (41.5)	98 (31.8)	
No data	89 (15.7)		
Number of children	0.82 (0.90)	1.03 (0.92)	*T*=−3.09, df=409, significant=0.002**
No data	82 (15.67)		
Contraception method			χ^2=1.846, df=5, significant=0.870
None	9 (6.9)	20 (7.3)	
Natural	48 (36.6)	106 (38.7)	
Mechanical	56 (42.7)	117 (42.7)	
Pills	11 (8.4)	14 (5.1)	
Multiple methods	2 (1.5)	4 (5.1)	
Operation	5 (3.8)	13 (4.7)	
No data	163 (28.7)		
Satisfaction from contraception method			χ^2=0.486, df=1, significant=0.486
Satisfied	17 (10.7)	26 (8.7)	
Unsatisfied	142 (89.3)	273 (91.3)	
No data	110 (19.4)		

Data are presented as mean (SD) or *n* (%). **The difference is significant at the level of 0.01, SD=Standard deviation

Table 5: Prevalence rates of sexual problems separated by age groups in men and women

	19-30 years, *n* (%)	31-40 years, *n* (%)	41-50 years, *n* (%)	Total, n (%)	No data, *n* (%)	χ^2 (significant)
Women						
Sexual desire	124 (56.9)	99 (38.1)	20 (33.3)	243 (45.2)	23 (4.1)	20.7482 (0.000)*
Arousal	91 (41.9)	93 (36.3)	22 (37.9)	206 (38.8)	30 (5.3)	1.5762 (0.455)
Vaginal moisture	14 (6.5)	16 (6.3)	7 (12.3)	37 (7.0)	34 (6.1)	2.7242 (0.256)
Orgasm	20 (9.3)	19 (7.4)	10 (16.9)	49 (9.2)	28 (5.0)	5.2862 (0.071)
General satisfaction	174 (80.9)	203 (79.3)	39 (68.4)	416 (78.8)	33 (5.9)	4.2962 (0.117)
Pain	18 (8.3)	22 (8.6)	8 (13.8)	48 (9.0)	30 (5.3)	1.7972 (0.407)
Total score	171 (81.8)	190 (76.0)	37 (68.5)	398 (77.6)	48 (8.6)	5.0672 (0.079)
Men						
Sexual drive	13 (8.7)	30 (9.9)	14 (16.3)	57 (10.6)	28 (4.9)	3.7032 (0.157)
Erection	75 (50.3)	101 (33.2)	42 (48.8)	218 (40.4)	29 (5.1)	15.1472 (0.001)*
Ejaculation	52 (34.9)	89 (29.7)	33 (37.9)	174 (32.5)	32 (5.6)	2.6602 (0.265)
Assessment of general problem	58 (39.5)	117 (39.1)	29 (34.1)	204 (38.4)	37 (6.5)	0.7952 (0.672)
Satisfaction	14 (9.0)	29 (9.1)	17 (18.1)	60 (10.6)	31 (5.5)	6.7462 (0.034)***
Total score	66 (45.2)	93 (31.6)	27 (32.5)	186 (35.6)	45 (7.9)	8.2392 (9.016)***

*The difference is significant at the level of 0.001, **The difference is significant at the level of 0.01, ***The difference is significant at the level of 0.05

In this study, the most common problem for women is sexual desire dysfunction and then arousal dysfunction. This finding is consistent with the results of Jafarzadeh Esfehani *et al*.[49] In their famous study, Laumann *et al*. mentioned sexual desire dysfunction and difficulty in achieving orgasm as one of the most common problems

Table 6: Mean and standard deviation of the brief male sexual function inventory and female sexual function inventory scores in the samples separated by age groups

	Mean (SD)			
	19-30 years	31-40 years	41-50 years	Total
Women				
Sexual desire	3.09 (0.07)	3.37 (0.06)	3.63 (0.14)	3.28 (1.05)
Arousal	3.78 (0.08)	4.05 (0.08)	4.26 (0.22)	3.96 (1.29)
Vaginal moisture	5.06 (0.08)	5.13 (0.07)	4.95 (0.18)	5.08 (1.15)
Orgasm	4.19 (0.07)	4.36 (0.07)	4.10 (0.20)	4.26 (1.10)
General satisfaction	2.62 (0.08)	2.82 (0.08)	2.97 (0.18)	2.75 (1.23)
Pain	5.96 (0.1)	5.81 (0.1)	5.77 (0.25)	5.86 (1.58)
Total score	24.71 (0.27)	25.57 (0.29)	25.93 (0.78)	25.25 (4.45)
Men				
Sexual drive	2.98 (0.07)	2.83 (0.05)	2.63 (0.10)	2.84 (0.86)
Erection	3.00 (0.07)	3.04 (0.04)	2.80 (0.09)	2.99 (0.79)
Ejaculation	3.27 (0.09)	3.43 (0.05)	3.19 (0.12)	3.34 (0.96)
Assessment of general problem	3.15 (0.08)	3.18 (0.06)	3.10 (0.11)	3.16 (1.00)
Satisfaction	2.99 (0.09)	2.98 (0.06)	2.72 (0.13)	2.94 (1.12)
Total score	3.10 (0.06)	3.12 (0.03)	2.94 (0.08)	3.08 (0.64)

SD=Standard deviation

of women.[21] Safarinejad also reported the problem of achieving orgasmic the most common problem for women in Iran.[37]

Sexual desire is not caused solely by sexual hormones. Sexuality is the subject that comprised biopsychosocial factors and therefore, paying attention to the role of culture and family, and cultural teachings regarding sexual relationships is important. Despite the cultural changes that have developed in Iran and especially in Tehran, sexual issues are still considered negative for women. The sexual desire of women in families is dealt with silence and ignorance, and families still tend to deny the sexuality of their daughters and consider them as asexual beings. Since the 1960s, the social participation of women gradually increased in Iran and women were valued for their education and having an independent income to the point where after three decades, the balance between well- and higher-educated women and men changed remarkably. Before then, women were mostly seen at home doing house chores, and the woman's presence in society was not acceptable. By changing this situation, the social development of women accelerated, but they were still ignored as someone who has sexuality. Considering sexuality as anti-value and suppressing it can worsen the related problems. In cultural teachings, women's sexual desire is not considered a desirable instinct that creates fun and saves the human being, but an undesirable feature that leads to corruption.

The dysfunction in arousal, which is placed in the second-highest rank, is interconnected to sexual desire. Reduction in sexual desire leads to lower sexual fantasies and subsequently, reduced arousal. On the other hand, less attention is paid on known and unknown hormonal problems which may be involved in arousal dysfunction, and like other issues related to sexuality, they are concealed. In addition, the lack of foreplay and manual stimulation by the husband does not create the necessary arousal in women.[96]

Many studies have shown the relationship between increasing sexual problems and aging,[20,25,37,40,49,50,60,81-86] but this study only found the relation between sexual desire problems and aging. Considering the age range of 18–50 years in this study (not including older ages), our study does not probably include an age range enough to show the effect of age on sexual problems. As the age increases, hormonal changes and change in living conditions and these problems worsen the prevalence of age problems.

In the current study, the duration of marriage in women with sexual problems is significantly lower than that of women without the problems. This finding is consistent with the finding of Heiman *et al*.'s[97] study but inconsistent with Safarinejad study results.[37] The women with problems are more likely to have a child (ren), have fewer children, and are also more dissatisfied with their contraception method. That woman with sexual problems more commonly have children has also been approved in other studies.[37,49,81,88] However, Rahman reported that women with sexual problems had more children than that of women with no such problems.[81] The level of education also does not correlate with the prevalence of sexual problems, and this finding agrees with the findings of Safarinejad and Clayton.[37,87]

Based on the findings of this study, the prevalence of sexual problems in women (77.6%) is more than that of men (35.6%). This difference is supported in all studies conducted worldwide, and women have always had more sexual problems.

The prevalence of sexual problems in men, in general, is reported to be 31%,[1] and it has been between 10% and 25% in other studies conducted in Iran. In the present study, the obtained prevalence was 35.6% that was higher than other statistics reported.

The most common reported problem in men is erectile dysfunction, which reported by 40.4% of the samples. Erectile dysfunction has been reported in the range of 2% to 7.66% in the studies conducted all over the world, and inconsistencies in reports are very high in different regions. In three studies conducted in Iran, the prevalence rates were 18.8%, 22.7%, and 27%, and the amount obtained in this study are far higher than those rates. The questionnaires used in these studies were different, and the difference in the values could be due to various study tools.

The next common problem is ejaculation dysfunction, which 38.4% of individuals reported it. The global reported rate is between 1% and 30% and two studies conducted in Iran reported the rates of 39.3% and 43.4% that are close to our findings.

The problem of sexual desire in this study is reported in 10.6% of men. Global reports range from 6% to 41% and two studies conducted in Iran have reported values of 4.7% and 57%, and the variability of findings in Iran is very high. It seems that there is not a similar understanding of the concepts of sexual drive and sexual desire.

Erectile problems and general men's problems increase with age, but the sexual desire and ejaculation problems did not show relations with age. The only demographic characteristic which was significant in two groups of men (with and without sexual problems) was having a child and the number of children.

About the high prevalence of sexual problems, it is necessary to train people regarding the identification, diagnosis, treatment, and prevention of these dysfunctions. Since sexual problems in having direct and indirect effects on different aspects of life,[98] and a high percentage of divorce and marital betrayal are the results of sexual problems, concealing and neglecting these issues will result in grave consequences.[95] It is necessary to pay special attention to women's sexual problems, to hold training courses for them, and attempt to change the views of the community about sexual relationships.[99]

Constraints and suggestions

Among the limitations of this study, in the first place, was the sensitivity of the study subject, which resulted in a lower response rate (42%). Even though the samples were selected from health centers, and the necessary background for participants was provided, the sensitivity of the study participants discouraged individuals from responding. People referring to health centers may not be representatives of the general population of Tehran. In addition, the selected age range did not include old- and middle-aged people, and the study subjects were at the peak of sexual activity. With aging, people refuse to respond and have a more traditional look to conceal sexual issues. The standard questionnaire for male sexual disorders has not been standardized in Iran that leads to problems with the problem assessment.

It is suggested to benefit from the findings of this study for planning preventive and educational programs to improve and raise the quality of marital relations and sexual satisfaction.

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Conflicts of interest

Personal interest.

References

1. Laumann EO, Paik A, Rosen RC. Sexual dysfunction in the United States: Prevalence and predictors. JAMA 1999;281:537-44.
2. Moreira ED Jr., Brock G, Glasser DB, Nicolosi A, Laumann EO, Paik A, *et al*. Help-seeking behaviour for sexual problems: The global study of sexual attitudes and behaviors. Int J Clin Pract 2005;59:6-16.
3. Moreira ED, Glasser DB, Nicolosi A, Duarte FG, Gingell C; GSSAB Investigators' Group. Sexual problems and help-seeking behaviour in adults in the United Kingdom and continental Europe. BJU Int 2008;101:1005-11.
4. IsHak WW. The Textbook of Clinical Sexual Medicine. Cham: Springer International Publishing; 2017.
5. Ishak IH, Low WY, Othman S. Prevalence, risk factors, and predictors of female sexual dysfunction in a primary care setting: A survey finding. J Sex Med 2010;7:3080-7.
6. Aslan E, Beji NK, Gungor I, Kadioglu A, Dikencik BK. Prevalence and risk factors for low sexual function in women: A study of 1,009 women in an outpatient clinic of a university hospital in Istanbul. J Sex Med 2008;5:2044-52.
7. Basirnia A, Sahimi-Izadian E, Arbabi M, Bayay Z, Vahid-Vahdat S, Noorbala AA, *et al*. Systematic review of prevalence of sexual disorders in Iran. Iran J Psychiatry 2007;2:151-6.
8. Fourcroy JL. Female sexual dysfunction: Potential for pharmacotherapy. Drugs 2003;63:1445-57.
9. Mykletun A, Dahl AA, O'Leary MP, Fosså SD. Assessment of male sexual function by the brief sexual function inventory. BJU Int 2006;97:316-23.
10. American Psychiatric Association. Diagnostic and Statistical Manual of Mental Disorders (DSM-5®). US: American Psychiatric Association Publishing; 2013.
11. Holmberg D, Blair KL, Phillips M. Women's sexual satisfaction

as a predictor of well-being in same-sex versus mixed-sex relationships. J Sex Res 2010;47:1-1.
12. Laumann EO, Paik A, Glasser DB, Kang JH, Wang T, Levinson B, *et al.* A cross-national study of subjective sexual well-being among older women and men: Findings from the global study of sexual attitudes and behaviors. Arch Sex Behav 2006;35:145-61.
13. Lau JT, Kim JH, Tsui HY. Mental health and lifestyle correlates of sexual problems and sexual satisfaction in heterosexual Hong Kong Chinese population. Urology 2005;66:1271-81.
14. Tiefer L. Beyond the medical model of women's sexual problems: A campaign to resist the promotion of female sexual dysfunction. Sex Relation Ther 2002;17:127-35.
15. McCabe MP, Sharlip ID, Lewis R, Atalla E, Balon R, Fisher AD, *et al.* Incidence and prevalence of sexual dysfunction in women and men: A consensus statement from the fourth international consultation on sexual medicine 2015. J Sex Med 2016;13:144-52.
16. Fugl-Meyer K, Fugl-Meyer AR. Sexual disabilities are not singularities. Int J Impot Res 2002;14:487-93.
17. World Health Organization. Defining Sexual Health: Report of a Technical Consultation on Sexual Health, 28-31 January 2002. Geneva: World Health Organization; 2006.
18. Goldstein I, Meston CM, Davis S, Traish A. Women's Sexual Function and Dysfunction: Study, Diagnosis and Treatment. US: CRC Press; 2005.
19. Nasehi AA, Raisi F, Ghaeli P, Amini M, Yahyavi ST, Arabkheradmand J, *et al*. Prevalence of sexual dysfunction among general population of Iran: A systematic review. Iran J Psychiatry Behav Sci 2017;11:e7643.
20. Lammerink EA, de Bock GH, Pascal A, van Beek AP, van den Bergh AC, Sattler MG, *et al.* A survey of female sexual functioning in the general Dutch population. J Sex Med 2017;14:937-49.
21. Laumann EO, Nicolosi A, Glasser DB, Paik A, Gingell C, Moreira E, *et al.* Sexual problems among women and men aged 40-80 y: Prevalence and correlates identified in the global study of sexual attitudes and behaviors. Int J Impot Res 2005;17:39-57.
22. Nicolosi A, Laumann EO, Glasser DB, Moreira ED Jr., Paik A, Gingell C. Sexual behavior and sexual dysfunctions after age 40: The global study of sexual attitudes and behaviors. Urology 2004;64:991-7.
23. Moreira ED, Glasser DB, King R, Duarte FG, Gingell C; GSSAB Investigators' Group. Sexual difficulties and help-seeking among mature adults in Australia: Results from the global study of sexual attitudes and behaviours. Sex Health 2008;5:227-34.
24. Bancroft J, Loftus J, Long JS. Distress about sex: A national survey of women in heterosexual relationships. Arch Sex Behav 2003;32:193-208.
25. Lutfey KE, Link CL, Rosen RC, Wiegel M, McKinlay JB. Prevalence and correlates of sexual activity and function in women: Results from the Boston Area Community Health (BACH) survey. Arch Sex Behav 2009;38:514-27.
26. Fajewonyomi BA, Orji EO, Adeyemo AO. Sexual dysfunction among female patients of reproductive age in a hospital setting in Nigeria. J Health Popul Nutr 2007;25:101-6.
27. Nwagha UI, Oguanuo TC, Ekwuazi K, Olubobokun TO, Nwagha TU, Onyebuchi AK, *et al.* Prevalence of sexual dysfunction among females in a university community in Enugu, Nigeria. Niger J Clin Pract 2014;17:791-6.
28. Najman JM, Dunne MP, Boyle FM, Cook MD, Purdie DM. Sexual dysfunction in the Australian population. Aust Fam Physician 2003;32:951-4.
29. Richters J, Grulich AE, de Visser RO, Smith AM, Rissel CE. Sex in Australia: Sexual difficulties in a representative sample of adults. Aust N Z J Public Health 2003;27:164-70.
30. Sidi H, Puteh SE, Abdullah N, Midin M. The prevalence of sexual dysfunction and potential risk factors that may impair sexual function in Malaysian women. J Sex Med 2007;4:311-21.
31. Alimohammadi L, Mirghafourvand M, Zarei F, Pirzeh R. The effectiveness of group counseling based on Bandura's self-efficacy theory on sexual function and sexual satisfaction in Iranian newlywed women: A randomized controlled trial. Appl Nurs Res 2018;42:62-9.
32. Mohammad-Alizadeh-Charandabi S, Mirghafourvand M, Asghari-Jafarabadi M, Tavananezhad N, Karkhaneh M. Modeling of socio-demographic predictors of sexual function in women of reproductive age. J Mazandaran Univ Med Sci 2014;23:238-42.
33. Ramezani MA, Ahmadi K, Ghaemmaghami A, Marzabadi EA, Pardakhti F. Epidemiology of sexual dysfunction in Iran: A systematic review and meta-analysis. Int J Prev Med 2015;6:43.
34. Bolourian Z, Ganjloo J. Evaluating sexual dysfunction and some related factors in women attending Sabzevar Health Care Centers. J Reprod Infertil 2007;8:163-70. [Persian].
35. Bakouei F, Omidvar S, Nasiri F. Prevalence of female sexual dysfunction in married women and its related factors (Babol 2006). J Babol Univ Med Sci 2007;9:59-64.
36. Gashtasbi A, Rahimi Forooshani A, Mohamadi A. Sexual dysfunction and its association with reproductive variables in the Kohgiluye and Boyer Ahmad province. Payesh 2008;7:67-73.
37. Safarinejad MR. Female sexual dysfunction in a population-based study in Iran: Prevalence and associated risk factors. Int J Impot Res 2006;18:382-95.
38. Avellanet YR, Ortiz AP, Pando JR, Romaguera J. Relationship between loss of libido and signs and symptoms of depression in a sample of Puerto Rican middle-aged women. P R Health Sci J 2008;27:85-91.
39. Shifren JL, Monz BU, Russo PA, Segreti A, Johannes CB. Sexual problems and distress in United States women: Prevalence and correlates. Obstet Gynecol 2008;112:970-8.
40. Laumann EO, Glasser DB, Neves RC, Moreira ED Jr.; GSSAB Investigators' Group. A population-based survey of sexual activity, sexual problems and associated help-seeking behavior patterns in mature adults in the United States of America. Int J Impot Res 2009;21:171-8.
41. Osborn M, Hawton K, Gath D. Sexual dysfunction among middle aged women in the community. Br Med J (Clin Res Ed) 1988;296:959-62.
42. Melin R, Fugl-Meyer KS, Fugl-Meyer AR. Life satisfaction in 18- to 64-year-old Swedes: In relation to education, employment situation, health and physical activity. J Rehabil Med 2003;35:84-90.
43. Kontula O, Haavio-Mannila E. Sexual Pleasures: Enhancement of Sex Life in Finland, 1971-1992. US: Dartmouth Pub., Co.; 1995.
44. Eplov L, Giraldi A, Davidsen M, Garde K, Kamper-Jørgensen F. Sexual desire in a nationally representative Danish population. J Sex Med 2007;4:47-56.
45. Colson MH, Lemaire A, Pinton P, Hamidi K, Klein P. Sexual behaviors and mental perception, satisfaction and expectations of sex life in men and women in France. J Sex Med 2006;3:121-31.
46. Amidu N, Owiredu WK, Woode E, Addai-Mensah O, Quaye L, Alhassan A, *et al.* Incidence of sexual dysfunction: A prospective survey in Ghanaian females. Reprod Biol Endocrinol 2010;8:106.
47. Hayes RD, Dennerstein L, Bennett CM, Fairley CK. What is the "true" prevalence of female sexual dysfunctions and does the way we assess these conditions have an impact? J Sex Med 2008;5:777-87.
48. Khazaei M, Rostami R, Zaryabi A. The relationship between sexual dysfunctions and marital satisfaction in Iranian married students. Procedia Soc Behav Sci 2011;30:783-5.
49. Jafarzadeh Esfehani R, Fazel N, Dashti S, Moshkani S, Haghighi Hasanabad F, Foji S, *et al*. Female sexual dysfunction and its associated risk factors: An epidemiological study in the North-East of Iran. J Midwifery Reprod Health 2016;4:498-505.
50. Oberg K, Fugl-Meyer AR, Fugl-Meyer KS. On categorization and quantification of women's sexual dysfunctions: An epidemiological approach. Int J Impot Res 2004;16:261-9.

51. Attaky A. The prevalence of sexual dysfunction among Arab female living in Saudi Arabia. J Sex Med 2017;14:e328.
52. Laumann EO, Gagnon JH, Michael RT, Michaels S. The Social Organization of Sexuality: Sexual Practices in the United States. US: University of Chicago Press; 1994.
53. Fugl-Meyer A, Sjogren K. Sexual disabilities, problems and satisfaction in 18-74 year old Swedes. Scand J Sexol 1999;2:79.
54. Barlow DH, Cardozo LD, Francis RM, Griffin M, Hart DM, Stephens E, *et al.* Urogenital ageing and its effect on sexual health in older British women. Br J Obstet Gynaecol 1997;104:87-91.
55. Kadri N, McHichi Alami KH, McHakra Tahiri S. Sexual dysfunction in women: Population based epidemiological study. Arch Womens Ment Health 2002;5:59-63.
56. Smith AM, Rissel CE, Richters J, Grulich AE, de Visser RO. Sex in Australia: The rationale and methods of the Australian study of health and relationships. Aust N Z J Public Health 2003;27:106-17.
57. Pacik PT, Geletta S. Vaginismus treatment: Clinical trials follow up 241 patients. Sex Med 2017;5:e114-e123.
58. Feldman HA, Goldstein I, Hatzichristou DG, Krane RJ, McKinlay JB. Impotence and its medical and psychosocial correlates: Results of the Massachusetts male aging study. J Urol 1994;151:54-61.
59. Nicolosi A, Moreira ED Jr., Shirai M, Bin Mohd Tambi MI, Glasser DB. Epidemiology of erectile dysfunction in four countries: Cross-national study of the prevalence and correlates of erectile dysfunction. Urology 2003;61:201-6.
60. Tleyjeh IM, Abdel-Latif A, Rahbi H, Scott CG, Bailey KR, Steckelberg JM, *et al.* A systematic review of population-based studies of infective endocarditis. Chest 2007;132:1025-35.
61. Shabsigh R, Perelman MA, Lockhart DC, Lue TF, Broderick GA. Health issues of men: Prevalence and correlates of erectile dysfunction. J Urol 2005;174:662-7.
62. Lockhat Y, Ross A, Ramlachan P, Rangiah C. The prevalence of erectile dysfunction at a primary healthcare clinic in Durban, KwaZulu-Natal. South Afr Fam Pract 2013;55:289-93.
63. Yovwin D, Imarhiagbe F, Obazee E, Oguike T. Erectile dysfunction in a sub-Saharan African population: Profile and correlates in a tertiary care hospital. Sahel Med J 2015;18:116.
64. Weber MF, Smith DP, O'Connell DL, Patel MI, de Souza PL, Sitas F, *et al.* Risk factors for erectile dysfunction in a cohort of 108 477 Australian men. Med J Aust 2013;199:107-11.
65. Martin SA, Atlantis E, Lange K, Taylor AW, O'Loughlin P, Wittert GA. Predictors of sexual dysfunction incidence and remission in men. J Sex Med 2014;11:1136-47.
66. Masumori N, Tsukamoto T, Kumamoto Y, Panser LA, Rhodes T, Girman CJ, *et al.* Decline of sexual function with age in Japanese men compared with American men – Results of two community-based studies. Urology 1999;54:335-44.
67. Kongkanand A. Prevalence of erectile dysfunction in Thailand. Thai erectile dysfunction epidemiological study group. Int J Androl 2000;23 Suppl 2:77-80.
68. Shaeer O, Shaeer K. The Global Online Sexuality Survey (GOSS): Erectile dysfunction among Arabic-speaking internet users in the Middle East. J Sex Med 2011;8:2152-60.
69. Tan WS, Ng CJ, Khoo EM, Low WY, Tan HM. The triad of erectile dysfunction, testosterone deficiency syndrome and metabolic syndrome: Findings from a multi-ethnic Asian men study (The subang men's health study). Aging Male 2011;14:231-6.
70. Khoo EM, Tan HM, Low WY. Erectile dysfunction and comorbidities in aging men: An urban cross-sectional study in Malaysia. J Sex Med 2008;5:2925-34.
71. Low WY, Khoo EM, Tan HM, Hew FL, Teoh SH. Depression, hormonal status and erectile dysfunction in the aging male: Results from a community study in Malaysia. J Mens Health Gender 2006;3:263-70.
72. Bai Q, Xu QQ, Jiang H, Zhang WL, Wang XH, Zhu JC. Prevalence and risk factors of erectile dysfunction in three cities of China: A community-based study. Asian J Androl 2004;6:343-8.
73. Cho BL, Kim YS, Choi YS, Hong MH, Seo HG, Lee SY, *et al.* Prevalence and risk factors for erectile dysfunction in primary care: Results of a Korean study. Int J Impot Res 2003;15:323-8.
74. Li MK, Garcia LA, Rosen R. Lower urinary tract symptoms and male sexual dysfunction in Asia: A survey of ageing men from five Asian countries. BJU Int 2005;96:1339-54.
75. Ho CC, Singam P, Hong GE, Zainuddin ZM. Male sexual dysfunction in Asia. Asian J Androl 2011;13:537.
76. Reza KB, Safarinezhad M. A survey of prevalence of sexual disorders and risk factors in patient who referred in urology ward in 501 hospital 2004-05. Annals of Military and Health Sciences Research 2007;4:1041-45.
77. Yekeh FL, Goudarzi MR. Prevalence of sexual dysfunction and related factors among married couples in Qazvin. J Qazvin Univ Med Sci 2009;13:10. [Persian].
78. Safarinejad MR. Prevalence and risk factors for erectile dysfunction in a population-based study in Iran. Int J Impot Res 2003;15:246-52.
79. Ahn TY, Park JK, Lee SW, Hong JH, Park NC, Kim JJ, *et al.* Prevalence and risk factors for erectile dysfunction in Korean men: Results of an epidemiological study. J Sex Med 2007;4:1269-76.
80. McMahon CG, Lee G, Park JK, Adaikan PG. Premature ejaculation and erectile dysfunction prevalence and attitudes in the Asia-Pacific region. J Sex Med 2012;9:454-65.
81. Rahman S. Female sexual dysfunction among muslim women: Increasing awareness to improve overall evaluation and treatment. Sex Med Rev 2018;6:535-47.
82. Petersen M, Kristensen E, Berg S, Midgren B. Sexual function in male patients with obstructive sleep apnoea. Clin Respir J 2009;173:186-191.
83. Dennerstein L, Guthrie JR, Hayes RD, DeRogatis LR, Lehert P. Sexual function, dysfunction, and sexual distress in a prospective, population-based sample of mid-aged, Australian-born women. J Sex Med 2008;5:2291-9.
84. Johannes CB, Avis NE. Gender differences in sexual activity among mid-aged adults in Massachusetts. Maturitas 1997;26:175-84.
85. Ghanbarzadeh N, Nadjafi-Semnani M, Ghanbarzadeh MR, Nadjfai-Semnani A, Nadjfai-Semnani F. Female sexual dysfunction in Iran: Study of prevalence and risk factors. Arch Gynecol Obstet 2013;287:533-9.
86. Lewis RW. Epidemiology of erectile dysfunction. Urol Clin North Am 2001;28:209-16, vii.
87. Clayton AH. Female sexual dysfunction related to depression and antidepressant medications. Curr Womens Health Rep 2002;2:182-7.
88. Valenzuela-Peters R, Contreras-García Y, Manriquez-Vidal C. Influence of the type of work shift in female sexual function index of healthcare sector female workers. Eur J Obstet Gynecol Reprod Biol 2017;210:39-44.
89. Ramezani Tehrani F, Farahmand M, Simbar M, Malek Afzali H. Factors associated with sexual dysfunction; a population based study in Iranian reproductive age women. Arch Iran Med 2014;17:679-84.
90. O'Leary MP, Fowler FJ, Lenderking WR, Barber B, Sagnier PP, Guess HA, *et al.* A brief male sexual function inventory for urology. Urology 1995;46:697-706.
91. Rosen R, Brown C, Heiman J, Leiblum S, Meston C, Shabsigh R, *et al.* The Female Sexual Function Index (FSFI): A multidimensional self-report instrument for the assessment of female sexual function. J Sex Marital Ther 2000;26:191-208.
92. Wiegel M, Meston C, Rosen R. The Female Sexual Function Index (FSFI): Cross-validation and development of clinical cutoff scores. J Sex Marital Ther 2005;31:1-20.
93. Mohammadi KH, Heydari M, Faghihzadeh S. The Female Sexual Function Index (FSFI): Validation of the Iranian version. Health Monitor J Iran Instit Health Sci Res 2008;7:269-278.

94. Mohammadi K, Rahnama P, Mohseni SM, Sahraian MA, Montazeri A. Determinants of sexual dysfunction in women with multiple sclerosis. BMC Neurol 2013;13:83.
95. Bolhari J, Ramezanzadeh F, Abedininia N, Naghizadeh MM, Pahlavani H, Saberi M. The survey of divorce incidence in divorce applicants in Tehran. J Fam Reprod Health 2012;6:129-37.
96. McCool ME, Zuelke A, Theurich MA, Knuettel H, Ricci C, Apfelbacher C. Prevalence of female sexual dysfunction among premenopausal women: A systematic review and meta-analysis of observational studies. Sex Med Rev 2016;4:197-212.
97. Heiman JR, Meston CM. Evaluating sexual dysfunction in women. Clin Obstet Gynecol 1997;40:616-29.
98. Nappi RE, Cucinella L, Martella S, Rossi M, Tiranini L, Martini E. Female sexual dysfunction (FSD): Prevalence and impact on Quality of Life (QoL). Maturitas 2016;94:87-91.
99. Montorsi F, Adaikan G, Becher E, Giuliano F, Khoury S, Lue TF, *et al.* Summary of the recommendations on sexual dysfunctions in men. J Sex Med 2010;7:3572-88.