



# The Relationship Between Sexual Function and Marital Satisfaction in Postmenopausal Women

Esmat Jafarbegloo<sup>1</sup>, Somayeh Momenyan<sup>2</sup> and Imaneh Khaki<sup>1,\*</sup>

<sup>1</sup>Midwifery Department, Qom University of Medical Sciences, Qom, Iran

<sup>2</sup>Paramedical School, Shahid Beheshti University of Medical Sciences, Tehran, Iran

\*Corresponding author: MSc of Midwifery, Midwifery Department, Qom University of Medical Sciences, Qom, Iran. Tel: +98-2537839737, Fax: +98-2537831370, Email: imanekhaki@yahoo.com

Received 2018 August 28; Revised 2018 December 02; Accepted 2018 December 08.

## Abstract

**Background:** The prevalence of sexual dysfunction increases during menopause. Some postmenopausal women are worried about reduced marital satisfaction due to sexual dysfunction.

**Objectives:** The purpose of this study was to investigate the relationship between sexual function and marital satisfaction in postmenopausal women.

**Methods:** This correlational study was carried out on 119 postmenopausal women in Qom, using the convenient sampling method. The data collection tools consisted of three questionnaires: (1) Demographic information, (2) female sexual function index (FSFI-19), and (3) enrich marital satisfaction questionnaire. Data were analyzed using the SPSS software version 18 and the Pearson correlation test with significance level of  $P < 0.05$ .

**Results:** Findings showed that there was no significant relationship between total score of sexual function and total score of marital satisfaction ( $P = 0.29$ ). Also, there were no significant correlations between score of sexual function in each domain and marital satisfaction.

**Conclusions:** The results of this study demonstrated that marital satisfaction in postmenopausal women is not likely to be affected by sexual dysfunction during this period. It seems that it is unseasonable for menopausal women to worry about marital conflicts and disruption of family relationship due to sexual dysfunction. It is necessary to prioritize the affecting issues on marital satisfaction at different stages of life and to provide counseling for them.

**Keywords:** Sexual Dysfunction, Marital Relationship, Questionnaire, Post-menopause

## 1. Background

Menopause is part of a woman's lifetime, during which menstrual cessation occurs due to hormonal changes. These fluctuations in women's hormonal levels can lead to abnormalities in their sexual function (1). Sexual dysfunction is defined as a disorder of desire, arousal, and orgasm in couples due to multiple factors, such as anatomical, physiological, and psychological, and can cause severe personal discomfort and affect quality of life and interpersonal relationships (2,3). The true prevalence of female sexual dysfunction is unclear, yet the US National Center for Health has reported that more than 40% of women aged 18 to 59 years old experience sexual dysfunction (4); this disorder increases after menopause (4-6). Marital satisfaction means having a pleasant mentality in the husband and wife from different aspects of their marriage (7), which directly affects their quality of life.

Many women experience sexual dysfunction after menopause (8). This disorder is detected when the sexual symptoms have occurred, and causes marital dissatisfaction among the husband and wife (4). Sexual relationships make a good impression on the husband and wife (9). The created sexual dysfunction during menopause has a negative impact on quality of life and interpersonal relationships (10). Hence, one of women's concerns about menopause is the negative effects of sexual dysfunction on their marital satisfaction (11).

In a qualitative study, postmenopausal women attributed family conflicts and marital dissatisfaction to a decline in sexuality and in fact, they feared that they would break their family relationships after sexual dysfunction, and they thought that due to reduced sexual function of women during menopause, the possibility of their spouses re-marriage would increase (11). Also, Bancroft et al. in their study, found that concerns about sexual issues and the re-

relationship between spouses increased with age (12).

On the other hand, the results of the Nappi and Nijland study, which was conducted on different groups of women, showed that a decrease in sexual relationships between the postmenopausal women, did not affect their life satisfaction. In this study, German postmenopausal women believed that sexual relationships lead to greater life satisfaction, and finally, many women mentioned that they had to maintain their sexual relations for communicating with their husbands. In this study, European middle-aged women stated that menopause is a process that can make changes in sexual relations; consequently, it can harm personal life (13).

Women spend nearly 30 years or more than a third of their life after menopause (6). Therefore, it is essential to study the issues of this period, separately. Many studies have indicated that sexual function has a direct significant relationship with marital satisfaction, yet limited studies were done on postmenopausal women.

## 2. Objectives

The present study was designed to investigate the relationship between sexual function and marital satisfaction in postmenopausal women.

## 3. Methods

The present study was a cross-sectional-correlation study conducted during year 2012 in Qom, Iran. In this study, 119 postmenopausal women, who referred to affiliated health centers (Izadi and Alzahra) to receive health care were chosen.

$$n = \left[ \frac{Z_{1-\alpha} + Z_{1-\beta}}{c} \right]^2 + 3 = 115 \quad (1)$$

$$c = 0.5 \times \ln \left( \frac{1+r}{1-r} \right) \quad (2)$$

According to the above formula, a minimum sample size of 115 samples was determined for this study. The value of the correlation coefficient was estimated as 0.3, according to a pilot study of 30 samples ( $\alpha = 0.05$  and  $1 - \beta = 0.9$ ).

### 3.1. Inclusion Criteria

Being an Iranian women (because of cultural differences), married, husbands being alive and living together, having passed at least one year of their menstruation, lack of hysterectomy, oophorectomy, cystocele and rectocele, and mastectomy, lack of psychiatric illness or a known disease in the women or their spouse (such as diabetes, high

blood pressure, and cancer), and lack of drug addiction and recent use of antidepressants. Women, who did not cooperate in answering sexual questions in the questionnaire, were excluded.

Sampling was done using the convenient sampling method. The data gathering tool consisted of three questionnaires: (1) Demographic information, (2) female sexual function index, (3) enrich marital satisfaction questionnaire. The questionnaires were completed by the main researcher. To encourage individuals to respond to the questions, a package of notebook and pencil was provided as a gift. The data in the demographic questionnaire included age, husband's age, the age gap between husband and wife, number of children, and age of menopause.

Female sexual function was evaluated by the female sexual function index 19: FSFI-19. Reliability and validity of this questionnaire were described by Rosen et al. (14). Also, its validity and reliability in Iran was determined by Mohammadi et al. in their study, Mohammadi et al. determined the Cronbach's alpha coefficient for each of the domains and the total scale as 0.70 and higher (2).

The questionnaire consisted of 19 questions in six areas: Sexual desire, arousal, lubricating, orgasms, sexual satisfaction, and pain. The scores of each field were calculated by summing the scores of the questions in each field and multiplying them by the factor number (the factors number in each area was: Desire = 0.6, lubrication and arousal = 0.3, pain and orgasm, and satisfaction = 0.4). By adding the scores of the six areas together, the total scale score was obtained. The minimum and maximum score was between 2 and 36. The total score of the FSFI questionnaire was 28 or more, indicating no sexual dysfunction. A score of less than 65% in each domain was recognized as a dysfunction (14).

In this study, marital satisfaction scale of enrich was used to assess marital satisfaction. This questionnaire contains the following subscales: Personality issues, marital satisfaction, conflict resolution, financial management, leisure activity, sexual relationship, children and parenting, family and friends, and religious orientation (15). In Iran, Soleymanian et al. formulated 47 questions that computed and reported the internal consistency of the test for a long form of 0.93 and for a short form of 0.95 (15). These questions had five options: Strongly agree, agree, neither agree nor disagree, disagree, and strongly disagree, which were ranked one to five, respectively. Some questions had a reverse score (4 - 6 - 8 - 11 - 12 - 13 - 14 - 15 - 16 - 18 - 19 - 20 - 21 - 22 - 23 - 24 - 25 - 30 - 32 - 35 - 37 - 38 - 39 - 40 - 41 - 42 - 43 - 45 - 46 - 47): Strongly agree, agree, neither agree nor disagree, disagree and strongly disagree, which were ranked five to one, respectively. The sum of individual scores for each question indicates the level of marital satisfaction. The minimum

and maximum scores of marital satisfaction are 47 and 235, respectively. A higher score means greater marital satisfaction (15, 16).

**Ethical considerations:** This study was also approved by the ethics Committee of Qom University of Medical Sciences (ethical code: p/34/2911) and written informed consent was obtained from all participants.

Data were analyzed by the SPSS software version 18 and the Pearson correlation test with significance level of  $P < 0.05$  was used.

#### 4. Results

Overall, 119 menopausal women participated in the current study. Demographic information is shown in Table 1.

The Pearson correlation test indicated that there was no significant relationship between total score of sexual function and total score of marital satisfaction ( $P = 0.29$ ). Also, there was no significant relationship between each domain of sexual function and marital satisfaction (Table 2).

In this study, the mean sexual function in postmenopausal women was  $22.35 \pm 8.87$ , 82.4% of which had sexual dysfunction. The most common sexual dysfunction of menopausal women was desire disorder 76.1% ( $n = 91$ ), arousal 64.2% ( $n = 70$ ), orgasm and lubrication 51.3% ( $n = 61$ ), satisfaction 44.5% ( $n = 53$ ), and pain 37.8% ( $n = 45$ ), respectively. Pearson correlation test indicated that there was a significant indirect correlation between women's sexual function and their age ( $P = 0.004$ ), their husbands' age ( $P = 0.003$ ), the age of marriage ( $P = 0.02$ ), and the number of children ( $P = 0.02$ ). Meanwhile, there was no significant relationship between sexual function and the age gap of couples and the age of menopause.

Table 1. Demographic Information

Demographic Information	Values <sup>a</sup>
Age	$54.34 \pm 6.54$ (42 - 78)
Husband's age	$61.11 \pm 9.20$ (60 - 86)
The age gap between husband and wife	$7/45 \pm 5.26$ (0 - 25)
The start age of menopause	$47.84 \pm 5.01$ (35 - 60)
Age of marriage	$17.35 \pm 5.58$ (9 - 38)
Number of children	$5.56 \pm 2.55$ (0 - 12)
Type of delivery	
Vaginal delivery, %	90.7
Cesarean delivery, %	9.3

<sup>a</sup>Values are expressed as mean  $\pm$  SD (min - max) unless otherwise indicated.

The mean Marital Satisfaction Score was  $137.6 \pm 17.82$  with a maximum score of 205 and minimum of 116. Pearson correlation test demonstrated that there was no significant relationship between the total score of marital satisfaction of women and their age, age of their spouses, age when married, number of children, the age gap of husband and wife, and the age of menopause.

#### 5. Discussion

The findings of the present study did not demonstrate a significant relationship between sexual function in postmenopausal women and their marital satisfaction ( $P = 0.29$ ). However, a study that examined the relationship between sexual function and marital satisfaction in postmenopausal women couldn't be found, so similar studies were used.

Litzinger and Gordon carried out a study on married women in the reproductive age with the aim of investigating the relationship between sexual satisfaction and marital satisfaction. The results showed that sexual satisfaction does not express marital satisfaction (17). Lodge and Umberson's study revealed that in couples, who are at an early stage of life, sexual conflicts is a cause of controversy between them, since couples do not have compatible experiences with each other; as time goes on, couples tend to be more accommodative in marital and sexual life (18). The study's results can also confirm the above points and it can be concluded that marital satisfaction is influenced by various factors during different periods of life. One of the reasons for this result, as mentioned, is the increase in age and the acquisition of compatible experiences throughout life. However, the other cause is cultural and religious issues. Cultural and religious values in a society impact the attitude of individuals towards the family (1, 13). Since cultural and religious beliefs in Iran emphasize on obtaining and maintaining marital satisfaction and establishing good relationships in the family, this can be a reason for the lack of correlation between sexual dysfunction and marital satisfaction in postmenopausal women.

The results of different studies demonstrated that marital satisfaction is high during two stages in women; one is at the beginning of marriage and the other is by increasing the length of marriage. This means that an increase in the duration of marriage, the common experiences of couples and their age can increase the marital satisfaction of women (9, 15). In his study, Van Laningham et al. found that marital happiness has a U shape curve, in a way that at both ends, during early and late marriage, happiness is greater (19). Abbasi et al. in her study aimed at examining changes in marital satisfaction and its dimensions during

**Table 2.** The Relationship Between Sexual Function Domains and Marital Satisfaction in Postmenopausal Women

	Sexual Function						
	Sexual Desire	Arousal	Lubrication	Orgasm	Sexual Satisfaction	Pain	Total Function Score
<b>Total score of marital satisfaction</b>							
r	0.08	0.16	0.002	0.04	0.14	0.07	0.1
P value	0.3	0.08	0.9	0.16	0.14	0.4	0.29

the life cycle of the family in 2010, and showed the highest marital satisfaction during the early stages of marriage and post-menopausal stages (20).

Other studies have shown that marital satisfaction is affected by sexual function. The results of Khazaei et al. a research on married students, demonstrated that sexual dysfunction significantly reduces marital satisfaction in young women (21). Aliakbari Dehkordi also showed that optimal sexual function enhances marital adjustment (9). The cause of the difference in the results of the mentioned studies compared with the current study, may be due to a difference in the age of women in these studies because the current study was conducted on postmenopausal women and their study was on young women. Also, in a study by Shahsiah et al. with the aim of effecting sexual education on marital satisfaction of couples in Isfahan, the results indicated that marital satisfaction increased with sexual education (22). Similarly, in a study by Rahmani et al. on sexual satisfaction and marital happiness on married women aged 19 to 58, the results indicated that marital happiness was significantly associated with sexual satisfaction (23). These studies have also been conducted on women of different ages.

Other studies have shown that with an increase in marriage duration, sexual satisfaction would be reduced while marital satisfaction would increase (24).

In the current study, 82.4% of postmenopausal women had sexual dysfunction. The most common disorder was sexual desire while this disorder in reproductive ages was reported as 31% (25). In this regard, Iranian and foreign studies reported a similar percentage with the current study, in which the prevalence of sexual dysfunction in Iranian postmenopausal women was 72.4% (26) and in foreign women, this was 68% to 86.5% (27).

In some studies, the prevalence of sexual dysfunction among elderly women was 43% to 53% (28, 29), and in postmenopausal women, this was 48% (30). In addition, in a study on postmenopausal women sexual function in Malaysia, the results demonstrated that in two-thirds of menopausal women, sexual desire was decreased (24).

In the current study, the mean age of menopause was  $47.84 \pm 5.01$ , which is similar to the menopausal age in studies carried out in Nigeria,  $47 \pm 4.2$  (31), and Bahrein,

$48.67 \pm 2.92$  (32). The results of the current study indicated that an increase in the age of women and their husband decreases female sexual function, which is consistent with the study of Nazarpour et al., which was a review of factors affecting the sexual function of postmenopausal women and demonstrated that the old age of a woman and her husband could reduce sexual function as an independent factor (33).

### 5.1. Limitations

A few postmenopausal women came to the clinic, extensive time was needed.

A limitation of this study was women answering to sexual questions. Furthermore, some women did not feel good about answering sexual questions and did not take part in the study.

### 5.2. Conclusion

The results of this study demonstrate that marital satisfaction in postmenopausal women has no relationship with sexual dysfunction during menopause. Therefore, it seems that worry of postmenopausal women to break up family relationships and marital conflicts due to their sexual dysfunction is unseasonable.

### Acknowledgments

The authors acknowledge the Deputy Research Director of Qom University of Medical Sciences and the women, who participated in this research project, as well as Mrs Naghipour and Mrs Alikhoiyan.

### Footnotes

**Authors' Contribution:** Study concept and design: Esmat Jafarbegloo; analysis and interpretation of data: Somayeh Momenyan; drafting of the manuscript: Imaneh Khaki; critical revision of the manuscript for important intellectual content: Esmat Jafarbegloo and Imaneh Khaki; statistical analysis: Somayeh Momenyan.

**Conflict of Interests:** The authors declare no conflict of interest.

**Ethical Considerations:** This study was also approved by the Ethics Committee of Qom University of Medical Sciences (ethical code:p/34/2911) and written informed consent was obtained from all participants.

**Funding/Support:** No funding.

## References

- Lo SS, Kok WM. Sexuality of Chinese women around menopause. *Maturitas*. 2013;**74**(2):190-5. doi: [10.1016/j.maturitas.2012.11.006](https://doi.org/10.1016/j.maturitas.2012.11.006). [PubMed: [23265305](https://pubmed.ncbi.nlm.nih.gov/23265305/)].
- Mohammadi K, Heidari M, Faghihzadeh S. [The female sexual function index (FSFI): Validation of the Iranian version]. *payesh*. 2008;**7**(3):269-78. Persian.
- Mohammad Alizadeh Charandabi S, Rezaei N, Hakimi S, Montazeri A, Khatami S, Karimi P. [Sexual function of postmenopausal women and its predictive factors: A community based study in Ilam, Iran, 2011]. *Iran J Obstet Gynecol Infertility*. 2012;**15**(23):1-9. Persian.
- Gutmann J. Exploring sexual dysfunction in the menopausal woman. *Sex Reprod Menopause*. 2005;**3**(1):8-11. doi: [10.1016/S1546-2501\(05\)00006-x](https://doi.org/10.1016/S1546-2501(05)00006-x).
- Thomas HN, Hess R, Thurston RC. Correlates of sexual activity and satisfaction in midlife and older women. *Ann Fam Med*. 2015;**13**(4):336-42. doi: [10.1370/afm.1820](https://doi.org/10.1370/afm.1820). [PubMed: [26195678](https://pubmed.ncbi.nlm.nih.gov/26195678/)]. [PubMed Central: [PMC4508174](https://pubmed.ncbi.nlm.nih.gov/PMC4508174/)].
- Jonathan S B. *Berek & Novak's gynecology*. 2. 15th ed. Wolters kluwer health/Lippincott Williams & wilkins; 2012. 1233 p. 1246.
- Pourakbaran E, Amin Yazdi SA. A study of sexual functioning and marital satisfaction in women with and without history of labor. *J Fundam Ment Health*. 2015;**17**(4):202-8.
- Malakooti J, farshbaf A, Asghari M, Jabbari F. [The effect of combined inhaled aromatherapy on sexual function postmenopausal women: a randomized controlled trial]. *Iran J Obstet Gynecol Infertility*. 2016;**18**(2):9-15. Persian.
- Aliakbari Dehkordi M. [Relationship between women sexual function and marital adjustment]. *J Behav Sci*. 2010;**4**(3):199-206. Persian.
- Safarinejad MR. Female sexual dysfunction in a population-based study in Iran: prevalence and associated risk factors. *Int J Impot Res*. 2006;**18**(4):382-95. doi: [10.1038/sj.ijir.3901440](https://doi.org/10.1038/sj.ijir.3901440). [PubMed: [16395324](https://pubmed.ncbi.nlm.nih.gov/16395324/)].
- Jamshidi Manesh M, Jouybary L, Peyrovi H, Sanagoo A. [The ups and downs of sex life in menopausal stage: A qualitative study]. *Qom Univ Med Sci J*. 2009;**3**(2):41-6. Persian.
- Bancroft J, Loftus J, Long JS. Distress about sex: a national survey of women in heterosexual relationships. *Arch Sex Behav*. 2003;**32**(3):193-208. doi: [10.1023/A:1023409516739](https://doi.org/10.1023/A:1023409516739). [PubMed: [12807292](https://pubmed.ncbi.nlm.nih.gov/12807292/)].
- Nappi RE, Nijland EA. Women's perception of sexuality around the menopause: Outcomes of a European telephone survey. *Eur J Obstet Gynecol Reprod Biol*. 2008;**137**(1):10-6. doi: [10.1016/j.ejogrb.2006.10.036](https://doi.org/10.1016/j.ejogrb.2006.10.036). [PubMed: [17207567](https://pubmed.ncbi.nlm.nih.gov/17207567/)].
- 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**(2):191-208. doi: [10.1080/009262300278597](https://doi.org/10.1080/009262300278597). [PubMed: [10782451](https://pubmed.ncbi.nlm.nih.gov/10782451/)].
- Soleymanian A. [A review of cognitive approach based on irrational thoughts on marital dissatisfaction] [dissertation]. Tarbiat Moallem University; 1992. Persian.
- Hormozi M, Bakhtiarpoor S. Comparing marital satisfaction, emotional divorce and religious commitment among nurses and employees of healthcare centers in the City of Ahvaz. *Int J Hum Cult Stud (IJHCS)* ISSN 2356-5926. 2016:1779-88.
- Litzinger S, Gordon KC. Exploring relationships among communication, sexual satisfaction, and marital satisfaction. *J Sex Marital Ther*. 2005;**31**(5):409-24. doi: [10.1080/00926230591006719](https://doi.org/10.1080/00926230591006719). [PubMed: [16169824](https://pubmed.ncbi.nlm.nih.gov/16169824/)].
- Lodge AC, Umberson D. All shook up: Sexuality of mid- to later life married couples. *J Marriage Fam*. 2012;**74**(3):428-43. doi: [10.1111/j.1741-3737.2012.00969.x](https://doi.org/10.1111/j.1741-3737.2012.00969.x). [PubMed: [22904574](https://pubmed.ncbi.nlm.nih.gov/22904574/)]. [PubMed Central: [PMC3418692](https://pubmed.ncbi.nlm.nih.gov/PMC3418692/)].
- Van Laningham J, Johnson DR, Amato P. Marital happiness, marital duration, and the u-shaped curve: Evidence from a five-wave panel study. *Soc Forces*. 2001;**79**(4):1313-41. doi: [10.1353/sof.2001.0055](https://doi.org/10.1353/sof.2001.0055).
- Abbasi M, Dehghani M, Mzaheri M. [Trend analysis of changes in marital satisfaction and related dimensions across family life cycle]. *J Fam Res*. 2010;**6**:5-22. Persian.
- 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. doi: [10.1016/j.sbspro.2011.10.152](https://doi.org/10.1016/j.sbspro.2011.10.152).
- Shahsiah M, Bahrami F, Etemadi O, Mohebi S. [Effect of sex education on improving couples marital satisfaction in Isfahan]. *J Health Syst Res*. 2010;**6**:690-7. Persian.
- Rahmani A, Merghati Khoei E, Alah Gholi L. Sexual satisfaction and its relation to marital happiness in Iranians. *Iran J Pub Health*. 2009;**38**(4):77-82.
- Zainah AZ, Nasir R, Hashim RS, Yusof NM. Effects of demographic variables on marital satisfaction. *Asian Soc Sci*. 2012;**8**(9):46-9.
- Mazinani R, Akbari Mehr M, Kaskian A, Kashanian M. [Evaluation of prevalence of sexual dysfunctions and its related factors in women]. *Razi J Med Sci*. 2013;**19**(105):61-8. Persian.
- Beigi M, Fahami F, Hasanahraei R, Arman S. Sexual dysfunction in menopause. *J Isfahan Med Sch*. 2008;**26**(90):294-300.
- Ambler DR, Bieber EJ, Diamond MP. Sexual function in elderly women: A review of current literature. *Rev Obstet Gynecol*. 2012;**5**(1):16-27. [PubMed: [22582123](https://pubmed.ncbi.nlm.nih.gov/22582123/)]. [PubMed Central: [PMC3349920](https://pubmed.ncbi.nlm.nih.gov/PMC3349920/)].
- Hayes RD, Dennerstein L, Bennett CM, Koochaki PE, Leiblum SR, Graziottin A. Relationship between hypoactive sexual desire disorder and aging. *Fertil Steril*. 2007;**87**(1):107-12. doi: [10.1016/j.fertnstert.2006.05.071](https://doi.org/10.1016/j.fertnstert.2006.05.071). [PubMed: [17081522](https://pubmed.ncbi.nlm.nih.gov/17081522/)].
- Lindau ST, Schumm LP, Laumann EO, Levinson W, O'Muircheartaigh CA, Waite LJ. A study of sexuality and health among older adults in the United States. *N Engl J Med*. 2007;**357**(8):762-74. doi: [10.1056/NEJMoa067423](https://doi.org/10.1056/NEJMoa067423). [PubMed: [17715410](https://pubmed.ncbi.nlm.nih.gov/17715410/)]. [PubMed Central: [PMC2426743](https://pubmed.ncbi.nlm.nih.gov/PMC2426743/)].
- Graziottin A. Menopause and sexuality: Key issues in premature menopause and beyond. *Ann N Y Acad Sci*. 2010;**1205**:254-61. doi: [10.1111/j.1749-6632.2010.05680.x](https://doi.org/10.1111/j.1749-6632.2010.05680.x). [PubMed: [20840281](https://pubmed.ncbi.nlm.nih.gov/20840281/)].
- Anolue FC, Dike E, Adogu P, Ebirim C. Women's experience of menopause in rural communities in Orlu, Eastern Nigeria. *Int J Gynaecol Obstet*. 2012;**118**(1):31-3. doi: [10.1016/j.ijgo.2012.02.014](https://doi.org/10.1016/j.ijgo.2012.02.014). [PubMed: [22542214](https://pubmed.ncbi.nlm.nih.gov/22542214/)].
- Jassim GA, Al-Shboul Q. Attitudes of Bahraini women towards the menopause: Implications for health care policy. *Maturitas*. 2008;**59**(4):358-72. doi: [10.1016/j.maturitas.2008.03.014](https://doi.org/10.1016/j.maturitas.2008.03.014). [PubMed: [18495386](https://pubmed.ncbi.nlm.nih.gov/18495386/)].
- Nazarpour S, Simbar M, Ramezani Tehran F. [Factors affecting sexual function during menopause: A review of the literature]. *Payesh*. 2014;**14**(1):41-58. Persian.