



Evaluating the relationship between the attitude toward menopause and sexual function in postmenopausal women

Evaluación de la relación entre la actitud hacia la menopausia y la función sexual en mujeres posmenopáusicas

Parvin Malek Mohammadi, Department of Nursing, Msc Student in Geriatric Nursing, School of Nursing and Midwifery, Shahid Sadoughi University of Medical Sciences, Yazd, Iran, <https://orcid.org/0009-0002-8972-9158>, Email: malekmparvin646@gmail.com
Ramesh Baradaran Bagheri, MD Infertility fellowship & OB & GYN specialist, Department of Obstetrics and Gynecology, Alborz University of Medical Sciences, Karaj, Iran, <https://orcid.org/0000-0002-9853-6799>, Email: dr.rameshbb@gmail.com
Fateme Shariati Far, Department of Nursing, Student Research Center, School of Nursing and Midwifery, Isfahan University of Medical Sciences, Internal-surgery Trend, Iran, <https://orcid.org/0009-0008-7302-3103>, Email: fatemehshariatifar@gmail.com
Mahboobeh Ansari, Department of Gynecology and Obstetrics, Larestan University of Medical Sciences, Larestan, Iran, <https://orcid.org/0009-0009-4843-7766>, Email: Mahboobeh.ansari2024@gmail.com
Maryam Mirzaei, Assistant Professor, Department of Obstetrics and Gynecology, Faculty of Medicine, Jiroft University of Medical Sciences, Jiroft, Iran, <https://orcid.org/0000-0002-0359-4305>, Email: m.mirzaei@kmu.ac.ir
Fateme Zarepour, Department of Nursing, School of Nursing and Midwifery, Ahvaz Jundishapur University of Medical Sciences, Ahvaz, Iran, <https://orcid.org/0000-0002-5827-8254>, Email: s78.zarepour@yahoo.com
Sedighe Manochehri, Department of Nursing, Nursing and Midwifery School, Ahvaz Jundishapur University of Medical Sciences, Ahvaz, Iran, <https://orcid.org/0009-0001-6924-6805>, Email: sedighemanochehri20@yahoo.com
Masumeh Ghazanfarpour, Assistant Professor of Reproductive Health, Student Research Committee, Kerman University of Medical Sciences, Kerman, Iran, <https://orcid.org/0000-0003-4639-3711>, Email: masumeh.ghazanfarpour@yahoo.com
*Corresponding Author: Ramesh Baradaran Bagheri, MD Infertility fellowship & OB & GYN specialist, Department of Obstetrics and Gynecology, Alborz University of Medical Sciences, Karaj, Iran, Email: dr.rameshbb@gmail.com
Received: 02/20/2022 Accepted: 05/19/2023 Published: 06/12/2024 DOI: <http://doi.org/10.5281/zenodo.12208347>

Abstract

Introduction & Background: Menopause is considered a crisis in women's lives as it causes several problems for them in the long term. The purpose of this study is to evaluate the relationship between the attitude toward menopause and sexual function in postmenopausal women.

Methods: This cross-sectional and analytical study was conducted on 396 postmenopausal women referring to health centers. They were selected using a convenience sampling method. The data collection tools included the demographic characteristics questionnaire, the female sexual function index (FSFI), and the Neugarten attitude toward menopause questionnaire. The data were analyzed in SPSS-18 software at a significance level of 0.5 using descriptive and analytical methods.

Results: The results revealed that the mean height of the subjects was 68 ± 14.73 years and the mean duration of menopause was 7.85 ± 7.05 years. Also, 32.5% of the subjects had a desirable sexual function, and 64% of women had a negative attitude toward menopause. No significant relationship was observed between sexual function and attitude toward menopause.

Conclusion: Women's attitude toward menopause was negative and low. Most menopausal women suffer from sexual dysfunction. These results indicate that optimal and efficient educational planning is necessary to change women's attitudes and improve the level of their health and quality of life.

Keywords: Attitude, Menopause, Sexual function, Postmenopausal.

Introducción y antecedentes. La menopausia se considera una crisis en la vida de las mujeres ya que le causa varios problemas a largo plazo. El propósito de este estudio es evaluar la relación entre la actitud hacia la menopausia y la función sexual en mujeres posmenopáusicas.

Métodos. Este estudio transversal y analítico se realizó en 396 mujeres posmenopáusicas remitidas a centros de salud. Fueron seleccionados mediante un método de muestreo por conveniencia. Las herramientas de recolección de datos incluyeron el cuestionario de características demográficas, el índice de función sexual femenina (FSFI) y el cuestionario de actitud de Neugarten hacia la menopausia. Los datos fueron analizados en el software SPSS-18 a un nivel de significancia de 0,5 utilizando métodos descriptivos y analíticos.

Resultados. Los resultados revelaron que la altura media de los sujetos fue de $68 \pm 14,73$ años y la duración media de la menopausia fue de $7,85 \pm 7,05$ años. Además, el 32,5% de los sujetos tenía una función sexual deseable y el 64% de las mujeres tenía una actitud negativa hacia la menopausia. No se observó relación significativa entre la función sexual y la actitud hacia la menopausia.

Conclusión. La actitud de las mujeres hacia la menopausia fue negativa y baja. La mayoría de las mujeres menopáusicas sufren de disfunción sexual. Estos resultados indican que es necesaria una planificación educativa óptima y eficiente para cambiar las actitudes de las mujeres y mejorar su nivel de salud y calidad de vida.

Palabras clave: Actitud, Menopausia, Función sexual, Posmenopausia.

Menopause is considered a natural event in a woman's life. It is particularly important as one of the health issues in the reproductive health area. This period is a complicated phase of women's lives due to physical and mental changes. It is one of the crises in women's life as it causes many problems in the long term such as reduced sexual ability in women. This period indicates the end of a woman's natural fertility period. Clinically, menopause occurs after 12 months of amenorrhea or cessation of menstruation¹. The average age for onset of menopause is 51 years. However, based on the studies, the mean age of menopause is 47.8 years². Due to an increase in life expectancy and an improvement in the quality of life and health care services, the population of the elderly is increasing. For example, there are currently more than 44 million women aged 45 to 54 years in the United States, and more than half of them suffer from the complications of this period including hot flashes, vaginal dryness, forgetfulness, joint pain, irritability and anxiety, feelings of sadness, depression, and night sweats³.

Since menopause is a fundamental change in a woman's life, it can be crucial from different personal, social, cultural, and health aspects⁴. Previous studies have indicated that women's attitudes toward menopause had an impact on accepting and managing the problems of this period⁵. If women are aware of what happens during menopause, they will accept the changes of this period better and will be more interested in health care specific to this period in light of gaining more knowledge and a positive attitude in this regard. Hence, the first line of health care and treatment during menopause is the effort of healthcare workers and physicians to create a positive attitude of women toward menopause and to change their traditional and superstitious beliefs in this area⁶. Due to the end of their reproductive years, many of these women consider this period as a period of liberation and freedom since they are not afraid of pregnancy and feel more comfortable compared to the pre-menopause period in addition to not taking responsibility for their children. Additionally, this period causes worry for some women due to the appearance of the signs of aging and the end of attractiveness for some other women⁷. The biological and hormonal changes related to this period occur the same all over the world. However, the attitude toward menopause varies significantly among different cultures and societies. Cultural attitudes toward menopause determine how women interpret and define menopause⁸. Sexual activity plays a significant role in menopause and has a great impact on women's physical health, well-being, self-confidence, and subsequently their quality of life⁹. The world's popu-

lation aging has made sexual health one of the most significant health issues for postmenopausal women¹⁰.

Nowadays, postmenopausal women are expected to live longer and many of them live to be 80 years old or more. Thus, the health of women in the years after menopause is as crucial as before menopause¹. The World Health Organization's definition of menopause is the permanent cessation of menstruation for 12 months due to the loss of activity of ovarian follicles rather than pregnancy or breastfeeding². Menopause is associated with many early complications, including hot flashes, insomnia, anxiety, depression, loss of concentration, changes in sexual desire, vaginal dryness, atrophy of the skin and mucous membrane, and late complications including cardiovascular complications and osteoporosis³.

Sexuality is one of the most complex and crucial aspects of women's lives and has various dimensions including biological, psychological, socio-economic issues, spiritual dimensions, etc. Sexuality is affected by everything, such as family, values, religion, fashionable ideas about women, personal experience of violence, diseases, etc. Also, personal and social relationships are crucial for women. A problem in a woman's sexual relationships will negatively affect her sexual function⁴.

Sexual dysfunction is defined as a persistent or recurrent decrease in sexual desire and sexual arousal, pain during intercourse, and difficulty or inability to reach orgasm³. Sexual problems and complaints are common throughout the reproductive period. However, sexual dysfunction is more common during menopause⁵.

Menopause is the primary phenomenon in middle-aged women's life. It is crucial in personal, cultural, and social dimensions. It is also of great importance as one of the health issues in women's fertility³. Sexual activity is one of the significant issues in people's quality of life. The increase in life expectancy and the increase in the elderly population have made sexual health a crucial issue in postmenopausal women⁴. Sexual instinct can be affected by factors such as diseases, substance abuse, social problems, aging, and menopause, and ultimately disturb people's mental health⁵. Lumen reported the prevalence of sexual dysfunction at 43% among women aged 18 to 59 years. He also referred to the significance of menopause as a factor in the increase of these dysfunctions⁶. Although physiological and pathological changes lead to these changes⁵, women's attitude toward menopause plays a vital role in creating or eliminating problems⁷. However, a few studies report attitudes toward sexual function in postmenopausal women, and the available studies report inconsistent results.

Wang et al. revealed that sexual activity is associated with sexual awareness and attitudes of men and women aged over 65 years⁸. Although the sexual attitude of older women is limited, studies have not reported any age-related decline in sexual activity. Also, they have not

confirmed a decrease in the frequency of sexual intercourse in postmenopausal women^{9,10}. Based on a study by Krantarat et al. on the attitude of postmenopausal women, 96% of women reported sexual intercourse during menopause as a normal natural part of life, 95% reported sexual intercourse as a way to make their partner happy, while 77% reported it as a way to make themselves happy¹¹. Some women view menopause as a time of freedom since they have no responsibility for their children and are no longer afraid of getting pregnant. Thus, they may feel more comfortable and be more sexually active than before. Moreover, this period is the beginning of worry, the appearance of signs of aging, and the end of attractiveness for some other women¹². Although women of reproductive age may be sexually inactive, menopause may reduce their sexual ability and make it disgusting to express sexual feelings¹³. Thus, the decrease in sexual desire and satisfaction is one of the concerns of menopause. Generally, marital satisfaction is one of the primary factors of life¹⁴. The prevalence of sexual dysfunction in postmenopausal women was 4 times higher than in women of reproductive age¹⁵. Additionally, the decrease in attractiveness, sexual desire, and sexual activity was the most common complaint after menopause¹⁶. The researchers indicated that 35% of postmenopausal women reported decreased sexual desire and 62% reported this dysfunction at various stages of life. The prevalence of decreased sexual desire in English, Italian, French, and German postmenopausal women was reported at 47, 54, 42, and 24%, respectively¹⁷. The prevalence of sexual dysfunction varies in different countries. However, a limited number of studies have been conducted on sexual function in different races and ethnicities.

Huang investigated 4 groups of postmenopausal women of different races and found that black and Latina women had higher sexual desire than white and Asian women. The highest frequency of intercourse was also found among Latina women and the lowest frequency was found among black and Asian women¹⁸. In another study on 44 to 55-year-old women of various races, African-American women were more sexually active than whites¹⁹. Nusbaum investigated white and African American women over 40 years of age and found that decreased lubrication was more common among whites than African Americans²⁰. Although researchers have taken the responsibility of using scientific methods to create the necessary adaptation and eliminate or reduce the problems of menopause²¹, less attention has been paid to the sexual problems of these women. Thus, these problems may be quite common during this period. Moreover, most studies have focused on the prevalence of this dysfunction and a few of them have investigated sexual function in different ethnicities. Due to the geographical location of Iran, many ethnicities have been living here for many years. Most of them belong to Persian, Lor, and Arab ethnicities. Hence, these three groups were selected as the population of this study.

These ethnicities differ in culture and habits which can affect sexual function. Thus, since Iran is a multi-ethnic country, the present study evaluates the prevalence of sexual dysfunction in postmenopausal women.

Although researchers have taken the responsibility of using scientific methods to create the necessary adaptation and eliminate or reduce the problems of menopause²²⁻²⁴, less attention has been paid to the sexual problems of these women. Thus, these problems may be quite common during this period. This study investigates the relationship between the attitude toward menopause and sexual function in postmenopausal women.

The present descriptive study was conducted on 396 menopausal women referring to health centers (Rheumatology department patients) in the Kerman City in 2023 with the code of ethics IR.KMU.REC.1399.534. Some health centers were selected using the cluster sampling method and postmenopausal women who met the inclusion criteria of the study were included in the study using a convenience sampling method. The inclusion criteria of the study included having informed consent, having Iranian citizenship, the presence of natural menopause (menstruation cessation for one year), having a husband, and having sexual intercourse with him. The exclusion criteria included early menopause (at the age of less than 40 years), menopause caused by surgery, suffering from diseases such as diabetes, cardiovascular disease, hyperlipidemia, respiratory problems, various types of cancer, or genital injuries and deformities. Sampling was done after obtaining the approval of the research from the Ethics Committee, receiving an official introduction letter from the Kerman University of Medical Sciences, and completing the informed consent by the subjects. The research tools included demographic characteristics form, Neugarten attitude toward menopause questionnaire, and female sexual function index.

The standard female sexual function index includes 19 questions that measure 6 dimensions of sexual function (desire, arousal, lubrication, orgasm, satisfaction, and pain during intercourse) during the last 4 weeks. The attitude toward menopause questionnaire includes 34 items scored on a Likert scale from 1 to 5. Its total and mean score is calculated by summing up the scores of all items. The appropriate cut-off score was determined at 26.55 for the total scale for diagnosing sexual function, 4.28 for sexual desire, 5.08 for arousal, 5.45 for lubrication, 5.05 for orgasm, and 5.04 for sexual satisfaction.

Neugarten questionnaire, which seeks to investigate the general attitude and feelings of elderly people with

the problem of aging, includes 20 items in 5 different areas of reasoning, goals, achieving dreams and goals, self-concept, and fitness. A score of 0 is considered for the option “disagree” and a score of 1 is considered for the option “agree”. Its mean score is 12.4.

The content validity method was used to determine the validity of Neugarten attitude toward the menopause questionnaire and female sexual function index. The reliability of Neugarten attitude toward the menopause questionnaire and female sexual function index was determined by the internal consistency method by calculating Cronbach’s alpha coefficient ($r=0.82$ and $r=0.78$, respectively). Three months after the completion of the sampling, the data were analyzed in SPSS-18 software and descriptive statistical indices including frequency, mean, standard deviation, and chi-square test. A P-value of less than 0.05 was considered significant.

In the present study, 396 postmenopausal women aged 45 to 85 years were investigated. The mean age of them was 57.18 ± 7.93 years. The highest age distribution was in the range of 51 to 55 years old (54%). The mean duration of menopause was 7.85 ± 7.05 years. The income of 47 people (12%) was less than expected and that of 61 people (15.4%) was more than expected. Also, 90% of them were unemployed and housewives.

Analyzing the female sexual function index indicated that the mean score of the total sexual function was 13.3 ± 3.13 . Table 1 presents the six areas of sexual function in percentage. The results showed that the lowest score was related to the area of sexual desire (3.1 ± 1.22) and the highest score was related to the area of sexual satisfaction (4.4 ± 1.27). The scores of other areas are as follows: sexual arousal= 3.1 ± 1.1 , lubrication= 3.89 ± 1.37 , orgasm = 4.11 ± 1.33 , and pain= 3.99 ± 1.24 . Generally, 37.5% of all menopausal women participating in the study had a desirable sexual function and 10.8% had a positive attitude toward menopause. The results of the chi-square test showed that 62.3% of menopausal women who had undesirable sexual function had a negative attitude toward menopause. However, the results of the chi-square test did not show a significant relationship between sexual function and attitude toward menopause Table 2. In other words, sexual function does not affect the attitude toward menopause ($p=0.06$).

Table 1. Frequency of sexual function areas in postmenopausal women

sexual function areas	N (%)	
	Desirable	Undesirable
desire	44(11.1)	352 (88.9)
arousal	79 (19.9)	317(80.1)
Lubrication	35(8.8)	361(91.2)
orgasm	138(34.8)	258(65.2)
Satisfaction	43(10.8)	353(89.2)

Table 2. Relationship between sexual function and attitude toward menopause in postmenopausal women

sexual function	N (%)		Total	P
	attitude toward menopause			
	Negative	Positive		
Desirable	106 (26.7)	43 (10.8)	149 (37.5)	0.06
Undesirable	101 (25.5)	146 (36.8)	247 (62.3)	
Total	207 (52.2)	289 (47.6)	396(100)	

The present study revealed no relationship between sexual function and attitude toward menopause. In other words, the sexual function of postmenopausal women does not affect their attitude toward menopause. In the present study, 52.2% of women had a negative attitude toward menopause. Similar to the results of this study, the study by Hasanpour and Abbasi showed that 78% of postmenopausal women had a negative attitude toward menopause²¹. However, in the study by Faraji, 7% of women had a negative attitude, 24% had a neutral attitude, and 75.5% had a positive attitude toward menopause. According to Shojaeizadeh and Ghashtaei, 69% of women had no attitude toward this issue²⁵. The study by Nowroozi et al. showed that 81.5% of postmenopausal women had a positive attitude toward menopause, which is not consistent with other studies conducted in Iran, like our study². This difference in results may be related to differences in the sample size or population of the studies. One of the studies reported conflicting results is the study by Alois and McKinlai in America as they showed that the attitude of the studied women had a feeling of comfort toward menopause and menstrual cessation and they thought that they are a positive and experienced person²⁶. Another factor related to sexual dysfunction and sexual satisfaction of women is their cognitive beliefs. Based on the cognitive theory, people will form beliefs about their sexual abilities and identity. Hendermark believes that beliefs and cognitive schemas underlie sexual behaviors and responses. These beliefs and cognitive schemas underlie sexual behaviors and responses. These beliefs and their underlying schemas, formed based on past experiences, affect how to process information related to sexuality and guide a person's sexual behavior in the future. In another study in India, women had a feeling of freedom regarding menopause²⁷. Also, more than 905 Italian women considered menopause as a positive event²⁸. In a meta-analysis of 30 studies worldwide, Taherpour (quoted by Ayzer) reported that most women have a negative attitude toward menopause and its symptoms, and complications²⁹. The difference between the studies conducted in Iran and other countries may be attributed to racial, religious, cultural, and attitudinal

factors³⁰. No significant relationship was found between sexual function and the attitude toward menopause. In other words, undesirable sexual function did not affect women's attitudes toward menopause. Although, in this study, the attitude of most postmenopausal women was negative, this negative attitude was not caused by undesirable sexual function. Several studies have indicated a relationship between a positive attitude toward menopause and desirable sexual function, including the study conducted by Kung Wan (2014) under the title "Knowledge, Attitude, and Symptoms of Menopause and its Management in Working Middle-aged Women". According to Kung Wan, self-confidence and a positive attitude toward menopause are needed to have a desirable sexual function³¹. Lim also reported that a positive attitude toward menopause leads to better management of sexual function and desirable sexual function³². Lee and Park also reported that Korean women who had a negative attitude toward menopause suffered from sexual dysfunction³³. In Iran, Beighi et al. investigated the relationship between sexual function and attitude toward menopause. Their results revealed that a positive attitude toward menopause is associated with positive sexual function and a negative attitude toward menopause is associated with negative sexual function³⁰. However, Blue and Daramula (2016), similar to the present study, concluded that despite the negative attitude of postmenopausal women toward menopause, their sexual function is not affected by this issue⁶. Also, Garcia et al. stated that sexual dysfunction in postmenopausal women is not associated with a negative attitude toward this phenomenon³⁴. In other words, sexual dysfunction is associated with many factors, including symptoms and complications of menopause³⁵. Some of these symptoms include hot flashes, vaginal dryness, joint pain, sleep disorder, and fatigue. All of them negatively affect the sexual function³⁶.

A study by Olaluram et al. investigated sexual function in urban society in Nigerian women. They reported that sexual desire is affected by increasing age, so women after menopause experienced decreased sexual desire and motivation³³. Generally, there is a possibility of sexual dysfunction during menopause, either because of women's negative attitude toward this phenomenon and some physiological and pathological changes specific to this period or due to a decrease in the level of hormones, especially estrogen. In other words, menopause can be a factor involved in causing or increasing sexual dysfunctions related to reproductive age³⁷. The situation will be worsened if the sexual dysfunction is associated with a negative attitude toward menopause. No relationship was found between sexual function and the attitude toward menopause in this study. However, we cannot ignore the fact that negative attitudes toward menopause cause sexual dysfunction. Since menopause is one of the most critical stages in a woman's life, it is accompanied by several symptoms and complications, including sexual dysfunction. Hence, having

sufficient knowledge and a positive attitude toward this phenomenon is a logical way to pass this stage easily²⁵.

In the present study, sexual dysfunction was found in all areas such as dysfunction in sexual desire and arousal, orgasm, and pain during intercourse.

Limitations

The limitations of the present study included the limited scope of the samples in terms of demographic characteristics and the generalizability of the study results. It is recommended for future studies to provide training about menopause and sexual function, and then follow up on this training.

Conflicts of interest

Authors declare no actual or potential conflict of interest related to this study.

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