Sexual Medicine, 2023, **11**, 1–9
https://doi.org/10.1093/sexmed/qfad031
Original Research

Effect of mindfulness on sexual self-efficacy and sexual satisfaction among Iranian postmenopausal women: a quasi-experimental study

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Abstract

Background: Menopause with anatomical, physiological, and psychological changes can affect sexual satisfaction and consequently the quality of life.
Aims: The study sought to evaluate the effects of mindfulness-based counseling on sexual self-efficacy and sexual satisfaction among Iranian postmenopausal women.
Methods: This quasi-experimental study was conducted on 110 women who were assigned to an intervention group (n = 55) and a control group (n = 55). The intervention group received 8 sessions of mindfulness-based training and daily mindfulness exercises. Data collection tools included questionnaires of demographics and midwifery, sexual self-efficacy, and sexual satisfaction. They were completed before and 8 weeks after the intervention. The collected data were analyzed through a *t* test, a chi-square test, and repeated-measures analysis of variance.
Outcomes: Changes in sexual self-efficacy and sexual satisfaction scores were evaluated.
Results: The mindfulness-based intervention significantly improved sexual self-efficacy ($F = 146.98$, $P = .000$, $\eta^2 = 0.576$) and sexual satisfaction ($F = 129.47$, $P = .000$, $\eta^2 = 0.545$) over time. The mean scores of sexual self-efficacy (17.03 ± 2.08) and sexual satisfaction (87.94 ± 8.26) in the intervention group increased after the intervention as opposed to the mean scores of sexual self-efficacy (12.65 ± 1.70) and sexual satisfaction (76.61 ± 6.45) in the control group.
Clinical Implications: Mindfulness training can improve sexual self-efficacy and sexual satisfaction in postmenopausal women.
Strengths and Limitations: The intervention was implemented on a population of menopausal women in a culture in which the expression of sexual issues is taboo and has not been noticed in the past. The main limitation of this study was self-reporting, which may have affected the responses. The next limitation was the nonrandomized controlled design. Finally, the research sample included menopausal women who were heterosexual and married. Hence, the findings may not be generalizable to more diverse samples. In this study, psychological maladjustment or psychological distress was not analyzed. They should also be considered in future research.
Conclusion: According to the results, it is advisable to employ mindfulness-based intervention in routine care, because it can improve different aspects of menopausal women's life.

Keywords: menopause; mindfulness; sexual satisfaction; sexual self-efficacy; women.

Introduction

From an empirical perspective, sexual satisfaction is defined as a strong indicator of relationship satisfaction[1,2] and of quality of life.[3] Nevertheless, low sexual satisfaction and sexual problems are common among older adults,[4,5] and middle-aged women experience lower sexual satisfaction than younger ones.[6,7] Although several factors affect sexual satisfaction, certain factors directly or indirectly influence this indicator in middle-aged women. Factors such as hormone-related physical and vasomotor symptoms,[8] dyspareunia resulting from vaginal atrophy and reduced vaginal elasticity,[9] and body image dissatisfaction cause postmenopausal women to feel less attractive than before the transition.[10] In addition, anxiety and depression may be more common during this period.[11-13] Therefore, a lack of self-confidence and low self-efficacy in postmenopausal women may impair their sexual function, which in turn can disrupt their marital relationships and reduce their quality of life.[14] Therefore, couples can improve the quality of their sex life if they maintain their sexual self-efficacy and self-esteem.[15] Sexual self-efficacy indicates a person's perceived ability to derive physical and mental pleasure from sexual experiences and is important to sustain sexual activity and alleviate symptoms of sexual dysfunction.[14] Sex therapists assert that sexual self-efficacy is a predictor of sexual function,[16,17] as people with higher sexual self-efficacy have more powerful sexual perceptions, experience greater sexual pleasure, and perform better psychosocially.[18] It seems low sexual self-efficacy has a detrimental effect on sexual behavior.[19] Accordingly, maintaining sexual self-efficacy can help postmenopausal women satisfy their sexual needs and desires and improve the quality of their sexual relationships.[14] Empirical evidence and previous theories suggest that sexual mindfulness[20] and sexual anxiety and self-esteem[21] are important psychosexual variables in sexual satisfaction.[22] According to some studies, improving mindfulness skills helps people increase their self-efficacy[23,24] and sexual satisfaction.[25,26] In addition, decreased sexual mindfulness has been shown to increase levels of sexual anxiety[27] and decrease

Received: April 10, 2022. **Revised:** April 3, 2023. **Accepted:** May 3, 2023
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sexual self-efficacy,[22] both of which lead to decreased sexual satisfaction.[21,28] Mindfulness is defined as self-regulation of awareness and acceptance of experience with no judgment.[29] People's experiences are classified in their minds based on their perceptions of the experiences.[30] Therefore, they can be considered sources of discomfort depending on how people classify and judge them.[31] Mindful people are curious about their experiences but consider them temporary events and leave them behind.[32] On the other hand, anxiety and negative thoughts and feelings (eg, feeling of unworthiness) are accompanied by being high in rejection sensitivity, having unreasonable expectations, and engaging in rumination.[33] Sexual mindfulness improves people's awareness and acceptance of their sexual thoughts and feelings and helps them fully explore their physical feelings and love perceptions.[34] Therefore, not surprisingly, people who are more mindful experience greater sexual satisfaction and improve their sexual function.[22]

Because postmenopausal women can no longer get pregnant and have fewer childbearing-related responsibilities, they seem to be more sexually active.[35] However, women in some cultures feel that they are not as attractive as they once were[36] or they consider having sex as shameful,[35] and unfortunately, they experience more problems at this time,[36] which can set the stage for marital violence and conflicts.[37] Although research related to sexual mindfulness and culture is limited, it seems that in individualistic cultures, people can easily practice mindfulness and experience better sexual satisfaction.[27] Iran has a nature of traditional culture.[38] In some its societies, pos menopause signifies the end of femininity[39] because infertility and changes in a woman's body make her feel that others, especially her husband, have lost respect for her.[38] Moreover, the cultural norms of Iranian society cause postmenopausal women to avoid expressing different aspects of their sexual life.[40] Therefore, it seems that implementing interventions to change intellectual content and negative feeling and focusing on mindfulness that includes identifying and accepting present experience to be useful,[41] especially for this group of women, whose population is expected to reach 1.2 billion by 2030.[41,42] Although there is a relationship between mindfulness and sexual satisfaction,[22] no studies have been conducted so far concerning the effects of mindfulness on sexual self-efficacy and sexual satisfaction in Iranian postmenopausal women. The present study is designed based on the following questions: (1) Can mindfulness-based education affect sexual self-efficacy after intervention? and (2) Can mindfulness-based education affect sexual satisfaction after intervention?

Methods

Participants and procedures

This quasi-experimental study was conducted with a pretest–posttest design for 8 weeks from May to October 2021 in Zahedan, Iran. The statistical population included all menopausal women visiting the comprehensive health centers in Zahedan. Located in the southeast of Iran, Zahedan is the capital of Sistan and Baluchistan Province. It has 32 health centers. In this study, the multistage sampling method as employed. For this purpose, 4 out of 32 health centers in Zahedan were first selected randomly through a randomizer software (random.org). Thereafter, to reduce the dissemination bias, 2 centers were randomly selected as the intervention group, whereas 2 other centers were selected as the control group. Based on the information in the household information system used in health centers (https://sib.iums.ac.ir/), the list of menopausal women was then extracted. According to the list, eligible individuals were then randomly selected and contacted. They were then included in the study after they managed to meet the other inclusion criteria. If a person from the list was neither eligible nor willing to participate in the study, subsequent cases were replaced. After the eligible subjects were contacted and provided with the information about the research objectives, they were asked to visit the designated centers to complete the questionnaires (Figure 1).

The inclusion criteria were as follows: at least 1 year elapsed since menopause, being married and having sex with a spouse, having a spouse with no physical illness, using no alcohol and no tobacco, undergoing no hormone therapy, having no menopause following surgery and premature ovarian failure, being younger than 60 years of age, experiencing no adverse life events during the last 6 months (eg, the death of loved ones), using no sedatives and antidepressants, using no drugs affecting sexual functions, and participating in no similar studies.

However, the exclusion criteria were the absence in 2 or more sessions and failure to complete more than 10% of the questionnaires.

Sample size

The sample size was estimated at 50 cases using the mean formula and based on the sexual self-efficacy score reported by Alimohammadi et al.[43] However, considering 10% sample attrition in the intervention and follow-up, the final sample size was calculated at 55 people in each group and a total of 110 cases.

$$N = (z1 - \alpha/2 + z1 - \beta)^2(s1^2 + s_2^2)/(x_1^- - x_2^-)^2$$

Study parameters were the following: alpha = 0.05, power = 0.80, delta = 8.8, $\bar{x}_1$=139.80, $\bar{x}_2$=131, $S_1 = 15.60$, $S_2 = 15.9$; and the estimated sample size was 110, so the number per group was 55.

Study instruments

Demographic and obstetrics characteristics

The questionnaire consisted of questions related to contextual, midwifery variables and marital satisfaction. In this section, the variables were designed quantitatively or qualitatively.

Sexual self-efficacy questionnaire

The sexual self-efficacy questionnaire is a standard scale based on the Schwartz General Self-Efficacy Questionnaire developed by Vaziri and Kashani. This 10-item questionnaire was designed in 4 dimensions from 0 (not correct at all) to 3 (completely correct).[44] In this questionnaire, the minimum and maximum possible scores are 0 and 30, respectively, which were divided into low (score >10), medium (score 10-20), and high (score <20) levels of sexual self-efficacy.[45] In the early introductory assessment, the reliability values of the sexual self-efficacy questionnaire were reported 0.86, 0.81, and 0.81, respectively, by using Cronbach's alpha, the Spearman-Brown split-half, and the Guttmann method.

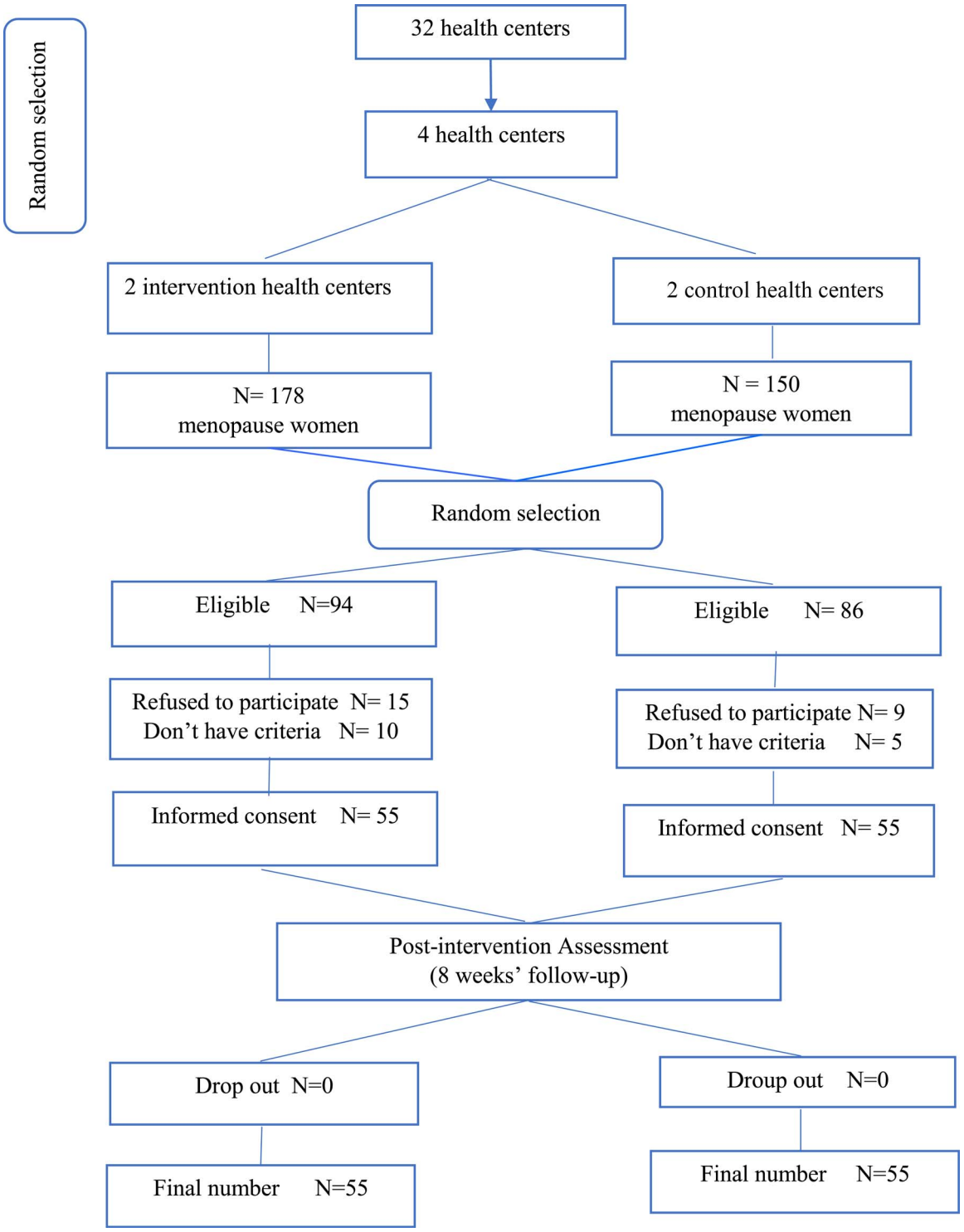

Figure 1. Flow chart of the study design.

The validity of the sexual self-efficacy questionnaire in Iran was confirmed with the content-dependent validity method.[18,44]

Sexual satisfaction questionnaire

The Larson Sexual Satisfaction Questionnaire is a standard scale developed by Larson et al.[46] This 25-item tool is rated on a 5-point Likert scale (always = 5, most of the time = 4, sometimes = 3, rarely = 2, and never = 1). The questionnaire score ranges between 25 and 125.[46] The sexual satisfaction in this questionnaire is classified as no satisfaction (score <50), low (score 50-75), moderate (score 100-76), and high (score >100).[47] Cronbach's alpha of this questionnaire was calculated at 0.93. Moreover, its reliability values were determined 0.93 for the fertile group and 0.89 for the infertile group by using Cronbach's alpha. Furthermore, the validity and reliability of this questionnaire were reported 0.76 and 0.81, respectively, in a study by Shabani and Abdi.[48]

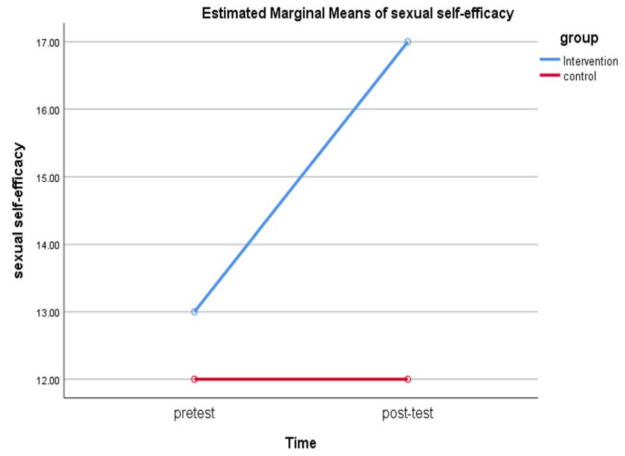

Figure 2. Sexual self-efficacy in the intervention and control groups. The mean score of sexual self-efficacy increased 8 weeks after the intervention in the intervention group, while no increase was observed in the control group.

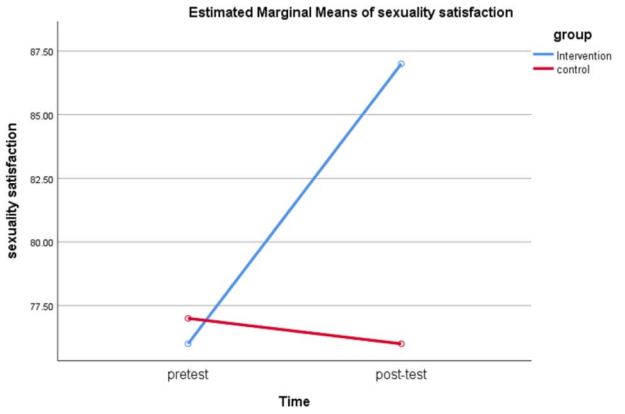

Figure 3. Sexual satisfaction in the intervention and control groups. Unlike the control group, the mean score of sexual satisfaction increased in the intervention group 8 weeks after the intervention.

Intervention and implementation steps

After the health centers and individuals were selected randomly by the head of the research team, the researcher provided the participants in the intervention group with the class schedule in the first session. The time of each session was then set. The counseling program was conducted by a researcher who had a valid certificate of mindfulness from the Ministry of Science, Research and Technology in the designated intervention centers during 8 sessions per week of 60 to 90 minutes per session for the intervention groups (in groups of 10 to 12) through the mindfulness-based method in accordance with the standard Kabat-Zinn protocol (Supplementary Appendix).

At the end of each session, the summary booklet of the same session was provided for the participants along with the assignment form. They were then asked to do their assignments 6 days a week and bring the homework form to the next session. During the intervention period, they were called twice a week to remind them of doing the homework and answering possible questions. Moreover, to reduce the possibility of sample attrition, the subjects were first trained and given sufficient explanations to participate in the next programs. Eight weeks after the intervention, the sexual self-efficacy and sexual satisfaction questionnaires were completed again in the intervention and control groups. Due to the COVID-19 pandemic and with regard to the observation of health protocols, the consultation room was disinfected before the sessions began. The social distance was also observed, and masks were provided for the participants. The control group received no interventions; however, the contents were provided for the control cases at the end of the study in summary forms so that the training could also be implemented for them as they wished.

Ethical considerations

This study was approved by the Ethics Committee of Zahedan University of Medical Sciences, Zahedan, Iran (ethical code: IR.ZAUMS.REC.1399.511). Necessary permissions were granted by Zahedan University of Medical Sciences and the provincial health center. Regarding the ethical considerations, personal information was kept confidential. In fact, the participants gave informed written consent. Moreover, they were allowed to leave the study at any stage.

Statistical analysis

Data analysis was performed in SPSS 24.0 (IBM). Descriptive statistics (ie, frequencies, percentages, mean, SD) were employed to present the research data. Differences in the baseline variables between the 2 groups were evaluated through the *t* test and chi-square test. Furthermore, the repeated-measures analysis of variance (ANOVA) was conducted to evaluate the effectiveness of the intervention and assess differences between pretest and posttest within groups. η_p^2 was also utilized to calculate effect sizes in the repeated-measures ANOVA with 0.01, 0.06, and 0.14 indicating small, medium, and large effect sizes, respectively.[49] Data normality was also determined by the Shapiro-Wilk test, and all *P* values were 2-sided.

Results

Overall, 110 eligible postmenopausal women participated in this study. Table 1 reports the demographic and contextual characteristics of the participants. According to the findings, the mean menopausal ages in the intervention and control groups were 49.85 ± 2.17 years and 49.65 ± 1.63 years, respectively. In addition, the duration lengths of menopause in the intervention and the control groups were reported 4.01 ± 0.71 years and 4.11 ± 0.55 years, respectively. Most of the cases in both groups were housewives, who were satisfied with their marital relationships. There were no statistically significant differences between the 2 groups in terms of demographic and contextual characteristics ($P < .05$) (Table 1). Table 2 presents the mean scores of sexual self-efficacy and sexual satisfaction before and after follow-up in the intervention and control groups. According to the findings in Table 2, most participants in the intervention (58.2%) and control (50.9%) groups had low levels of sexual self-efficacy before the intervention. In addition, 56.37% of the cases in the mindfulness group and 60% of participants in the control group had low levels of sexual satisfaction (Table 2). The independent *t* test revealed no statistically significant differences between the 2 groups in terms of the mean score of sexual self-efficacy ($P = .567$) and sexual satisfaction ($P = .694$) before the intervention.

The repeated-measures ANOVA was employed to compare changes over time (Table 3) and between groups (Table 4). The test results indicated a significant association between

Table 1. Characteristics of participants at baseline (N = 110).

Variable	Intervention group (n = 55)	Control group (n = 55)	*P*
Age, y	53.86 ± 2.38	53.12 ± 2.21	.741[a]
Gravid, n	5.55 ± 0.48	5.18 ± 0.23	.389[a]
Marriage length, y	27.89 ± 2.33	27.10 ± 2.05	.445[a]
Menopause age, y	49.85 ± 2.17	49.65 ± 1.63	.587[a]
BMI, kg/m ^{2}	27.38 ± 3.25	27.58 ± 3.82	.806[a]
<25 kg/m^2	12 (21.8)	19 (34.5)	.052[b]
≥25 kg/m^2	43 (78.2)	36 (65.5)	
Menopause length, y	4.01 ± 0.71	4.11± 0.55	.861[a]
1-4 y	37 (67.2)	33 (60)	.319[b]
≥5 y	18 (32.8)	22 (40)	
Women's educational status			
Primary, secondary	28 (50.9)	23 (41.8)	.127[b]
Middle and upper	27 (49.1)	32 (58.2)	
Spouse's educational status			
Primary, secondary	19 (34.5)	20 (37)	.853[b]
Middle and upper	36 (65.5)	34 (63)	
Women's employment status			
Housewife	46 (83.6)	50 (90.9)	.728[b]
Employee	9 (16.4)	5 (9.1)	
Spouse's employment status			
Unemployed	22 (40)	17 (30.9)	.319[b]
Employee	33 (60)	38 (69.1)	
Marriage satisfaction			
Yes	15 (27.4)	22 (40)	.508[b]
No	8 (14.5)	7 (12.7)	
So-so	32 (58.1)	26 (47.3)	
Income			
Sufficient	8 (14.5)	6 (10.9)	.681[b]
No sufficient	47 (85.5)	49 (89.1)	
Fairly sufficient	18 (34.7)	21 (38.2)	

Values are mean ± SD or n (%). Abbreviation: BMI, body mass index. [a]Independent *t* test. [b]Chi-square test.

Table 2. The mean score and frequencies of sexual self-efficacy and sexual satisfaction in the 2 groups before and after the intervention.

	Intervention group (n = 55)		Control group (n = 55)	
	Pretest	**Posttest**	**Pretest**	**Posttest**
Sexual self-efficacy	13.27 ± 2.17	17.03 ± 2.08	12.90 ± 2.08	12.65 ± 1.70
Low (<10)	32 ± 58.2)	18 (32.74)	28 (50.90)	30 (54.55)
Moderate (10-20)	23 (41.81)	29 (52.72)	27 (49.1)	25 (45.45)
High (>20)	0	8 (14.54)	0	0
Sexual satisfaction	76.45 ± 6.63	87.94 ± 8.26	77.20 ± 6.13	76.61 ± 6.45
Nonsatisfaction (<50)	0	0	0	0
Low satisfaction (50-75)	31 (56.37)	18 (32.73)	33 (60)	31 (56.39)
Moderate satisfaction (76-100)	22 (40)	34 (61.82)	21 (38.2)	23 (41.81)
High satisfaction (>100)	2 (3.63)	3 (5.45)	1 (1.8)	1 (1.8)

Values are mean ± SD or n (%).

group and time regarding sexual self-efficacy with a high effect size ($F = 129.47$, $P = .000$, $\eta^2 = 0.545$) (Table 3). Moreover, sexual self-efficacy increased significantly over time in the intervention group ($F = 164.38$, $P = .000$, $\eta^2 = 0.753$). However, no significant differences were observed in the control group ($F = 1.68$, $P = .200$, $\eta^2 = 0.030$) (Table 4). Figure 2 demonstrates the differences between the 2 groups in the mean score of sexual self-efficacy before and after the intervention (Figure 2).

Regarding the mean score of sexual satisfaction, there was a significant association between group and time with a high effect size ($F = 146.98$, $P = .000$, $\eta^2 = 0.576$) (Table 3). Sexual satisfaction in the intervention group increased significantly over time ($F = 139.37$, $P = .000$, $\eta^2 = 0.621$). However, in the control group, no significant differences were observed ($F = 7.65$, $P = .008$, $\eta^2 = 0.023$) (Table 4). According to Figure 3, there were differences between the mindfulness and control groups in terms of the mean score of sexual satisfaction before and after the intervention (Figure 3).

Discussion

This study aimed to evaluate the effects of mindfulness on sexual self-efficacy and sexual satisfaction in postmenopausal women. Eight weeks after the intervention, the results indicated that the mean scores of sexual self-efficacy and sexual satisfaction increased in the mindfulness group compared with those in the control group. In addition, the percentage of people who experienced higher levels of sexual self-efficacy

Table 3. Differences between pre- and posttest outcome scores within and between groups and effects of group and time evaluated by repeated measures analysis of variance.

	Intervention group (n = 55)		Control group (n = 55)		Time effect			Group × time interaction effect		
	Pretest	Posttest	Pretest	Posttest	*F*	*P*	η2	*F*	*P*	η2
Sexual self-efficacy	13.27 ± 2.27	17.03 ± 2.08	12.90 ± 2.05	12.65 ± 1.70	98.78	.000	0.478	129.47	.000	0.545
Sexual satisfaction	76.45 ± 6.63	87.94 ± 8.26	77.20 ± 6.13	76.61 ± 6.45	120.01	.000	0.526	146.98	.000	0.576

Values are mean ± SD or n (%).

Table 4. Differences between pre- and posttest outcome scores within groups.

	Intervention group (n = 55)			Control group (n = 55)		
	F	*P*	η2	*F*	*P*	η2
Sexual self-efficacy	164.38	.000	0.753	1.68	.200	0.030
Sexual satisfaction	139.37	.000	0.621	7.65	.008	0.023

increased in the intervention group. At the same time, most cases in both groups had low levels of sexual satisfaction before the intervention. After the intervention, the percentage of sexual satisfaction increased in the intervention group. However, no significant changes were observed in the control group, a finding that indicated the positive effects of mindfulness counseling on self-efficacy and sexual satisfaction of postmenopausal women. The research results were consistent with the findings of other studies on the role of mindfulness in romantic relationships and sexual self-esteem,[25,50,51] sexual self-efficacy and marital satisfaction,[24] intimacy, and acceptance of couples[52,53] in different age groups. The authors could not find a study that found the effect of mindfulness on sexual self-efficacy and sexual satisfaction in postmenopausal women. However, the effect of mindfulness has been investigated in various fields of menopause, for example, a study assessed the effects of mindfulness on menopausal symptoms such as vasomotor effects and reported positive results.[54] In another study conducted on 60 postmenopausal women, the quality of life and the quality of sleep as well as relaxation were significantly improved in the mindfulness group compared with the control group.[55] Moreover, Jalambadani[56] conducted a study on 104 postmenopausal women and revealed that mindfulness alleviated stress and improved healthy lifestyles. The results of the previous studies showed the effectiveness of mindfulness in different dimensions.

According to previous findings, sexual self-efficacy can predict sexual satisfaction.[16,17] Also, enhancing sexual self-efficacy can improve many underlying sexual problems in women.[57] However, Kafaei Atrian et aldid not report a relationship between sexual self-efficacy and sexual satisfaction in married women in their study. Differences in population, society, culture, and study type can cause these contradictions. Nonetheless the results of the present study showed the effectiveness of mindfulness in improving the sexual self-efficacy of postmenopausal women. This finding is compatible with similar studies but in other populations.[24,58] Mindfulness creates a nonjudgmental perception in a person that leads to efficient and consistent behaviors in the present. It can also encourage the person to accept the current situation. This recognition might be effective in increasing self-efficacy and helping a person focus on their feelings and sexual experiences.[24] Such pieces of training will probably make menopausal women see the connection between their thoughts, feelings, and emotions and respond to the problems of this period of life with more skill and self-efficacy.[41]

Another finding of the study indicated an improvement in the sexual satisfaction scores of postmenopausal women. In this regard, Leavitt et al[51] reported that couples with higher levels of mindfulness were more satisfied with their marital relationships. Omidvar et al[59] reported the effective role of mindfulness-based interventions in improving sexual satisfaction among 45 women with vaginismus. Brotto et al[60] indicated the positive effects of mindfulness on women with vestibulodynia after an 8-session intervention. Based on the results of a study conducted by Sánchez-Sánchez et al,[61] people in the mindfulness condition showed higher scores in sexual activity, sexual satisfaction, and erotic fantasies. The results of the present study agree with these studies. Postmenopausal women's perceptions of their physical conditions and decreased sexual desire can change the types of their relationships with their husbands.[62] In some societies, menopause is not considered a natural process in women's lives, and this negative attitude can affect their quality of sexual life and satisfaction.[63] Mindfulness training requires metacognitive learning and novel behavioral strategies to focus on attention and prevent mental rumination and the tendency to give anxious responses.[64] Mindfulness also increases a person's awareness of physical and mental emotions; therefore, it enables people to accept unpleasant thoughts and eliminate elusive behaviors. As a result, stressful life events can be facilitated more easily.[65] It seems nonjudgment during a sexual experience may lead to improvement of sexual self-efficacy even after considering their own conditions and following leads to improved sexual satisfaction. Of course, the ability to be nonjudgmental, especially in stressful situations such as menopause, requires a greater level of skill in sexual mindfulness that must be learned and practiced. In fact, it can be said with mindfulness, women become more attuned to the sensations they are feeling and recognize that they do have some control in how they experience sex and the surrounding pleasure. Possibly, when they let go of judgment and are more curious, they experience a connection with their partner or with their own sexual arousal that creates a sense of ability and satisfaction. This intervention was conducted on a population of menopausal women in a culture in which women feel too shy and do not know what to do to achieve their sexual goals, and they consider having sex only as a

duty in marriage. Also, the expression of sexual issues is a taboo subject. A similar study in the past was not found in this group of women in a traditional culture, something that is considered a strength of this research. The main limitation of the present study is the sensitivity of the subject due to the taboo nature of sexual issues in Iranian culture and society, especially in the study area, which can affect the way individuals responded correctly. The next limitation of this study was the nonrandomized controlled design, which can reduce the strength of the evidence and can also have an effective role in generalizing the results. In addition, the time limitation and the long-term effects of mindfulness-based interventions on marital intimacy and sexual self-efficacy remain to be determined. Finally, the research sample included menopausal women who were heterosexual and married. The research findings may not be generalizable to more diverse samples. In this study, psychological maladjustment and psychological distress were not analyzed. They should be evaluated in future studies.

Conclusion

The results of this study indicated the positive effect of mindfulness training on sexual self-efficacy and sexual satisfaction in postmenopausal women. Although further studies are required in this regard, mindfulness can be associated with several individual benefits including improving self-esteem, reducing negative emotions, and enhancing marital relationships during menopause. In general, mindfulness trainings can be used by women during menopause without any side effects. In other words, the intervention can be considered a complementary healthcare program for women. Accordingly, healthcare providers can be advised to add mindfulness to their interventions in the care of postmenopausal women and encourage postmenopausal women to participate in mindfulness-based training programs.

Supplementary material

Supplementary material is available at *Sexual Medicine* online.

Funding

None.

Conflict of Interest: The authors declared no potential conflicts of interest concerning the research, authorship, and/or publication of this article.

Availability of data

The datasets generated and/or analyzed during the current study may be available from the corresponding author on reasonable request.

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