Original Article

Effect of Group Counseling on Quality of Life among Postmenopausal Women in Hamadan, Iran

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Objectives: This study aimed to investigate the effect of counseling on quality of life (QOL) in postmenopausal women conducted in Hamadan, Iran in 2015.

Methods: In this quasi-experimental study, 80 postmenopausal women were randomly selected and allocated to case and control groups (40 per group). Data collection tool included questionnaires of demographic information and QOL during menopause, which were completed by the samples before the intervention. In the case group, training program was run during four sessions in the form of weekly consulting sessions for 45 to 60 minutes. Training program included familiarity with menopause symptoms, confrontation and self-care during this period. The control group, only received routine cares. Three months after intervention, information were collected in both groups. Data were analyzed using SPSS for Windows.

Results: Before the intervention, mean ± standard deviation for QOL in case group was 101.2 ± 31.4 and it was significantly decreased to 96.9 ± 27.0 after intervention ($P < 0.05$). While no significant change was observed in the control group (from 98.9 ± 35.5 to 102.3 ± 35.0, $P = 0.443$). Symptoms of physical ($P = 0.033$) and sexual ($P < 0.001$) dimensions significantly decreased in the case group. While significant increase was observed in terms of psychosocial ($P = 0.049$) and sexual symptoms in control group.

Conclusions: Findings suggested impact of consulting on improvement of QOL during menopause. Supportive consulting can be a suitable approach for improving women's health, reducing problems and enhancing QOL in menopause period. **(J Menopausal Med 2017;23:49-55)**

Key Words: Menopause · Quality of life · Referral and consultation

Introduction

In current century, population aging phenomenon is occurred due to a decrease in mortality rate, advances in medical sciences, health education and increase in life expectancy.[1] Although women and men have common health issues, women face specific issues arising from their physiological conditions. One of these issues is menopause transition period that is associated with complications. Some of these effects include vasomotor disturbances, hot flashes, night sweats, and psychological changes (mood disorders, depression, anxiety, loss of concentration, memory loss and irrigation, sexual dysfunction).[2,3] Awareness of the menopaue symptoms and consequences can be effective in reducing problems and increasing quality of life (QOL) of menopausal women.[4,5] Normal menopause is defined as permanent cessation of menstruation due to the absence of ovarian follicular activity, and it happens 12 months after cessation of menstruation.[6] Menopause represents the end of a woman's fertility which is associated with estrogen

deficiency and has significant impact on women's health related QOL.[7] The average age of natural menopause in women is between 42 to 58 years old and the median age is 51.4 years.[8] Average menopausal age in Iranian women was reported lower (47.8 years old) than other counterprise.[9] Menopause is considered as an important turning point for women who contains end of their menstruation and pregnancy phase. Although menopause is a biologic process and a general event for the women, it is not defined and experienced in the same way for all women. Individual's psychological and mental condition, emotional health, and sociocultural status are involved in this experience.[10] Menopause symptoms are closely related to QOL of women during menopausal period and can influence QOL of women both physiologically, psychologically, and socially.[11] Studies in Iran and other countries suggested negative effect of menopause on QOL in menopausal women.[12,13] Menopausal women are more susceptible than other women in terms of vasomotor disorders (10.6 times), social-psychological disorders (3.5 times), physical disorders (5.7 times) and sexual disorders (3.2 times), thus these women experience lower QOL.[14] Findings by Chen et al.[15] indicated that menopause was associated with negative impacts on QOL of Chinese women. The study by Wlliams et al.[16] in United State of America showed that demographic characteristics and menopausal symptoms experienced by women influenced their QOL in menopausal period. With increased life expectancy and life time, the QOL become an important issue.[17] In other words, if the main challenge of 20th century was increasing life expectancy, the main challenge in 21th century is living with higher quality.[18] According to World Health Organization (WHO), QOL is individual's perception of current life situation, in the cultural background and value systems in which he grew up and relation of these perceptions with his respective goals, expectations, standards, and priorities.[19] WHO considered a program focused on empowerment processes in elderly people in three areas including elderly people development, health and welfare improvement, and creating supportive environment.[11] One of the challenges regarding menopause is unawareness and lack of access to related information and issues in menopausal women. The key to solve this problem is increasing women's awareness related to learning

methods suitable with the social background and norms.[20,21] Women constitute half of the world population. They are largest health care receivers so that 61% of doctors' visits and 59% of medicines are allocated to women. Hence, promoting the health and providing wellbeing in women's life period bring about better QOL of them and it will have useful outcomes for the society.[22] In recent years, medical professionals have been focusing on training and informing programs for improving health status in women. Women during menopause period need health providers consulting to enhance their health awareness. The main goal of consulting is achieving better health outcomes by promoting performance in professional care and providing effective information regarding treatment principles. Therefore, consulting is one of the tools for promoting QOL. Thus, considering importance of proper information for planning for prevention and reduction of menopausal consequences, current study aimed to investigate impact of consulting on QOL of postmenoposal women in Hamadan, Iran.

Materials and Methods

This research was a quasi-experimental study. The study was conducted on 80 postmenopausal women referring to health centers in Hamadan, Iran in 2015. Sample size was calculated using following formula:

$$n = \frac{(Z_{1-\frac{\alpha}{2}} + Z_{1-\beta})^2 (\sigma_1^2 + \sigma_2^2)}{(\mu_2 - \mu_1)^2}$$

Sample size was estimated as 40 for each group for studying QOL in two groups ($\alpha = 0.05$, $\beta = 0.02$) considering scores of QOL in previous studies.[17,18]

Sampling process was done as following: four centers were randomly selected out of health centers in Hamadan, and 20 qualified menopausal women were selected from each center using random sampling. Inclusion criteria included: aged between 45 to 60 years, stopping menstruation for at least 12 months without using drugs, no mental illness, no known systemic disease, lack of hormone therapy and no history of hysterectomy. Exclusion criteria included: failure to participate in more than one session of counseling sessions, reluctance to continue the study, occurrence of stress-

inducing events (such as death of relatives, accident) during the study.

Prior to running the research, participants were informed about research objectives, verbal and written consent were taken from them. Control group were qualified menopausal women, who received only routine care annually included: breast exam, pelvic exam, control hot flashes and other menopausal symptoms, control of blood pressure (BP) and weight gain, prescription to undergoing Papsmear test and mammography.

Case group included menopausal women who received routine care of menopausal period plus consulting program. They were divided into small groups (maximum 10 persons) for participating in the consulting sessions. Consulting program was held weekly as four in 45 to 60 minutes sessions. These consulting sessions were designed and implemented based on greet, ask, tell, help, explain, and return (GATHER) consulting steps. That is, firstly clients were communicated by welcome, introducing sessions and describing its goals (greeting). Then, they were asked about the worries and symptoms of menopause (ask). In relation with menopause, symptoms and consequences were explained to women (tell). Participants were helped to become aware of ways of better self−care (help). Adequate explanations were provided related to how to implement self−care techniques properly (explain). In these consulting sessions, such topics as impression and attitude of women about menopause and physical, emotional, and psychological changes were discussed. Also, women's experiences in coping with physical symptoms, psychological and mental changes, stress management, anxiety, fear, changes in family and social roles, and their sources of support were discussed. In consulting sessions, participants were informed that they can consult with an investigator if they have problem or any question about menopause. Also, they could take part in the training class after ending consulting session every weeks up to three months. For encouraging women to participate in the study women's BP, weight gain and body mass index (BMI) were also checked in the consulting sessions. Finally, after three months all participates in both groups were asked to reurn to health care centers and they were evaluated for investigating the QOL (return).

Data collection tool included demographic characteristics and Menopausal Specific QOL Questionnaire (MENQOL). Demographic questionnaire included items about age, menopausal age, education, occupation, and income, and health status of individuals. MENQOL is a reliable tool for measuring QOL which has been used in previous researchs and it has been developed by Hilditch et al.[23], Lewis et al.[24] in Canada, and Gold et al.[25] in United States. In Iran, Falahzadeh et al.[26] investigated reliability of this scale using Cronbach's alpha as 0.85. This scale consists of a total of 29 items and asesses four domains of menopausal symptoms including vasomotor (3 items), psychosocial (7 items), physical (16 items), and sexual (3 items) domains. These items are measured by a seven−point Likert scale. Zero score was assigned to option "Never" and score 7 was allocated to option "Severely". Minimum and maximum obtained score in each vasomotor (3−21), psychosocial (7−49), physical (16−112) and sexual domains (3−21), and total score of QOL (29−203) were calculated by sum of the domains. The higher scores denote severe symptoms of menopause and lower QOL in menopausal women. Before intervention, demographic questionnaire and MENQOL were completed by two groups in the interview session. Post−test was taken three months after consulting intervention and questionnaires were again completed by the participants. Data analyzed using SPSS for Windows (version 16; SPSS Inc., Chicago, IL, USA).

In order to estimate the mean, standard deviation, distribution of frequencies, descriptive statistics were used. In order to compare different aspects QOL and individual characteristics between groups, analysis of covariances (ANCOVA) and independent t−test were used. Paied t−test was used to compare changes within each group. $P < 0.05$ was considered as significant.

Results

Participants characteristics has been revealed in Table 1. Two groups were homogenous in terms of mean age, age at menopause, BMI, employment status, number of children, and economic conditions were significant difference between two groups. The mean age of menopausal women was 55 years and the majority of women were illiterate (46.3%) and

Table 1. Comparison of participants' characteristics in the case and control groups

Variables	Intervention	Control	Statistics	P value
Age (years)	55.0 ± 5.3	55.4 ± 4.6	t = 0.44	0.657
Age of menopause (years)	48.1 ± 7.9	49.2 ± 3.4	t = 0.80	0.7425
Weight (kg)	72.0 ± 10.8	71.2 ± 12.8	t = 0.31	0.757
Blood pressure (mm/Hg)				
Systole	120.57 ± 20.3	120.12 ± 20.1	t = 1.234	0.221
Diastole	70.80 ± 10.5	70.97 ± 9.9	t = 0.723	0.472
Marital status			X^2 = 0.73	0.397
Single	0 (0.0)	0 (0.0)		
Married	31 (77.5)	34 (85.0)		
Widow	9 (22.5)	6 (15.0)		
Body mass index			X^2 = 3.31	0.452
< 18.5	0 (0.0)	1 (2.5)		
18.5-24.9	10 (25.0)	8 (20.0)		
> 30	17 (42.5)	23 (57.5)		
Education level			X^2 = 4.79	0.154
Illiterate	19 (47.5)	18 (45.0)		
Primary	16 (40.0)	10 (25.0)		
Secondary	4 (10.0)	7 (17.5)		
Diploma	1 (2.5)	5 (12.5)		
Family income ($)			X^2 = 2.92	0.234
< 300	12 (30.0)	10 (25.0)		
300-500	27 (67.5)	25 (62.5)		
> 500	1 (2.5)	5 (12.5)		
Housing status			X^2 = 1.32	0.462
Owner	35 (87.5)	37 (92.5)		
Renter	5 (12.5)	3 (7.5)		

The data is presented as mean ± standard deviation or number (%)

only 7.5% of them had higher education. All the women were housewives. Most of the participants had average level of QOL (67%).

Paired t−test showed that after intervention, mean score of vasomotor, psychosocial, physical, and sexual domains were reduced in case group. While significant increase was observed in control group in terms of psychosocial (P = 0.049) and sexual symptoms ($P < 0.001$).

ANCOVA test with controlling pre−test score showed there was no significant difference after intervention between case and control group in vasomotor (P = 0.790), psychosocial (P = 0.130), physical (P = 0.281) domains, and total QOL (P = 0.123). But the difference was only significant in sexual domain (P = 0.02) (Table 2). The changes in the mean score and standard deviation of items of sexual domain have been shown in Table 3.

Table 2. Comparison of quality of life dimensions before and three months after intervention in case and control groups

Dimensions	Case group, (mean ± SD)	Control group, (mean ± SD)	P value*
Vasomotor			0.790
Before	9.4 ± 4.7	10.7 ± 6.2	
After	9.1 ± 4.5	10.3 ± 6.1	
P value[†]	0.306	0.591	
Psychosocial			0.130
Before	25.5 ± 10.9	23.3 ± 9.5	
After	25.5 ± 9.3	25.7 ± 8.9	
P value[†]	0.937	0.049[‡]	
Physical			0.281
Before	53.4 ± 18.3	54.0 ± 20.3	
After	50.1 ± 15.9	53.7 ± 19.1	
P value[†]	0.033[‡]	0.936	
Sexual			0.02[‡]
Before	12.7 ± 7.2	10.4 ± 7.6	
After	12.1 ± 6.5	12.7 ± 7.2	
P value[†]	< 0.001[§]	< 0.001[§]	
Total			0.123
Before	101.2 ± 31.4	98.8 ± 35.5	
After	96.9 ± 27.0	102.3 ± 35.0	
P value[†]	0.049[‡]	0.443	

*P values calculated using analysis of covariance
[†]P values calculated using paired t-test
[‡]P < 0.05
[§]P < 0.01
SD: standard deviation

Table 3. Comparison of sexual dimension of the menopause-specific quality of life questionnaire before and three months after intervention in case and control groups

Items	Case group, (mean ± SD)	Control group, (mean ± SD)	P value*
Decreased sexual desire			< 0.001
Before	4.32 ± 3.0	3.82 ± 2.7	
After	3.68 ± 2.9	4.52 ± 2.6	
P value[†]	0.006	0.001	
Vaginal dryness			0.035
Before	4.02 ± 2.8	2.92 ± 2.8	
After	4.12 ± 2.8	3.75 ± 2.6	
P value[†]	0.578	< 0.001	
Avoid intercourse			< 0.001
Before	4.45 ± 2.8	3.65 ± 2.9	
After	3.80 ± 2.6	4.50 ± 2.5	
P value[†]	0.018	0.001	

*P values calculated using analysis of covariance
[†]P values calculated using paired t-test
SD: standard deviation

Discussion

Current study investigated impact of consulting on QOL in postmenopausal women. Research findings indicated positive impact of implementing four consecutive sessions of the consulting program on improving QOL. Given study by Gold et al.[25], there was significant relationship between QOL of menopausal women with educational and economic status. Thus, control and case groups were selected homogenous in terms of demographic characteristics. In the current study, the most common symptoms were decreased sexual domains, feeling lack of energy, muscle and joint pain. But the most common symptom in previous study by Falahzadeh et al.[26] in Iran was hot flash, and the study by Chen et al.[15] in China was memory loss. In the study by Farokhi et al.[27], the most common symptom was feeling lack of energy that was consistent with our study, and total score of QOL was improved after holding life skill training sessions, but no significant difference was observed in terms of psychosocial aspects.

In the current study, changes in pre- and post-sexual domains of QOL were significant in both groups. However, their changes were more meaningful in case group compared to control group. Sexual problems such as decrease in sexual desire and avoiding sexual practices were decreesed in case group. It can be due to the fact that after consulting sessions, all case group members could consult with a consultant in case of coping problems or questions about menopause and its complications. Also, they could refer to the agreed place up to three months after the last consulting

session to visit their consultant, discuss about their issues and find solutions. In addition, findings in the current research were consistent with findings by Yazdkhasti et al.[11] and Rotem et al.[28]. Yazdkhasti et al.[11] reported one month after training sessions in the intervention group, symptoms of vasomotor, psychological, physiological, and sexual domanins were improved ($P < 0.001$). Rotem et al.[28] reported a positive effect of support group method to improve attitude and compatibility with physical and psychosocial symptoms in 80 menopausal women. In the current research, most of women had average QOL (67%), which was similar with finding by Abedzadeh et al.[10], Bluemel et al.[14], and Sharifnia et al.[20]. In the research by Li et al.[29], 82% of menopausal women had good QOL. In their study, psychosocial (41.01%) and sexual (67.2%) domains were suitable. Aloumanis et al.[30] stated high QOL and expressed that women with high education level had higher QOL compared to other women. Perhaps, having higher life facilities, higher awareness, and educational level were related to higher QOL in these women. The reason for difference between some findings in the current research and previous studies may be due to variety in the demographic characteristics, so that majority of participants in present study were illiterate (46.25%), 65% of them had income below 1.5 million tomans (equal to $500).

One of the limitations in this study was small sample size which may not be generalizable to other groups and communities. So, it is suggested that future studies will be conducted at wider population and ranges. Also, it is suggested that impact of group and individual consulting will compare on menoposal women QOL for the future investigations.

Conclusion

Research findings suggested that consulting and training may improve QOL in menopause period. Considering necessity for menopausal care, it is recommended that consulting methods are used in health care centers as a routine care for menopausal women.

Acknowledgement

Conflict of Interest

No potential conflict of interest relevant to this article was reported.

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