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Original Article

The Effect of Support Group Method on Quality of Life in Post-menopausal Women

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Abstract

Background: Quality of life in post-menopausal women and menopausal symptoms are closely related concepts. Influence health education policy in order to promote health and adopt a menopause lifestyle requires alternative strategies, including health training programs with community – based interventions. The current study aims to survey the effects of support groups on quality of life of post-menopausal women.

Methods: A blind field trial (2010) was conducted at Saadatmandii Clinical Center (Robat Karim, Iran). 110 women were selected randomly divided into test and control groups (consisting of 55 ones). Menopause specific quality of life questionnaire (MENQOL) was used for evaluation of life quality before and three months after intervention; there was no intervention in the control group. Data were analyzed by using SPSS/16. Qualitative variables were analyzed using chi-square tests and quantitative variables were analyzed using Mann-Whitney and Wilcoxon test, paired T-test and independent *t*-test.

Results: There was significant difference between vasomotor, psychosocial, physical, sexual aspects and life quality of this group pf women ($P<0.001$). There was no statistically significant difference in the quality of life of women in control group.

Conclusion: According to the results method of support group can lead to improved quality of life for post-menopausal ones and it can be appropriate healthcare policy to promote health and improve life quality of this group of women.

Keywords: Support group, Quality of life, Post-menopausal women

Introduction

Health is the fundamental rights of every human being and improvement of educational methods is a public duty (1). Considering the limited research in this field, a programmed approach to learning is evident in various cycles of life including menopause as the most critical period of women's life (2). Lack of knowledge and access to relevant information is the major challenge faced by menopausal women intensified by contradictory information (3).

Women's awareness of learning styles consistent with social norms and context is the key to solving this problem (4). Quality of life and menopausal symptoms are closely related concepts (5) and would affect women's quality of life (physiological and psychosocial) (6).

Health education intervention strategy is one of the alternative strategies (7) for improving women's attitudes and coping with menopause symptoms (8) identified as one of the sub-categories of health promotion programs (9). This may promote the health behavior of the patients and their families and will change life threatening life styles (10). In a group discussion considering postmenopausal women's opinion about application of instructional methods, 83% of participants were demanding information about menopause and strategies to deal with it through educational methods. There was significant relationship between severity of menopausal symptoms and decreasing level of life quality, too (11).

A group expressed willingness to apply several instructional methods to overcome these symptoms (12). One of these methods is "support group" which can be developed in different populations that, with regard to this issue and social and cultural context, is reflected in the focus of health interventions (13). This method is an efficient tool in quality of life research due to mutual exchange of experiences, promotion of critical thinking and verbal skills (14).

Rotem examined the effectiveness of an instructional program on support group to cope with physical, sexual, psycho-social menopause symptoms; the intervention effect was significant (8). Rostami performed an educational program using the lecture and the Q & A methods that led to improvement of menopausal symptoms including physical, sexual and psycho-social aspects (12).

The support group of mental and physical health of Alzheimer's caregivers had a minor impact on the burden of care and would only increase their knowledge (15,16). However, according to some studies using this method on caregivers of patients with psychotic disorders and schizophrenia would lead to increased awareness as well as reducing stress, easing burdens of care and enabling them to better deal with the patient (17).

Considering low number of studies investigating proper instructional methods lack of educational support group programs, disregarding women as emotional or psychological center of family life and especially great effect of improving the quality of life on promoting family and, consequently, community health (18, 19) this study examined the effect of structured curriculum by using support group, on quality of life in postmenopausal women.

Materials and Methods

A single-blind trial was conducted in August to December 2010 at Saadatmandi Health Center (RobatKarim, Iran). The study population included 110 healthy postmenopausal Iranian, literate, Muslim and married women. They were two to seven years after menopause. With CI of 95% and power of 80% the maximum sample size was obtained by using S=1.01 and quality of life scores on physical dimension (8). The total sample was estimated to be 110 cases. The minimum number of samples in each group was 55 (predicted 10% drop). First the subjects were selected using non probability-convenient sampling and then were randomly divided into two test and control groups. Inclusion criteria were as follows: not using hormone replacement and no smoking within 6 months and till the end of the study period, no history of Hysterectomy, body mass index (BMI)

less than 30 (kg/m2) and not employed in any health systems. Criteria for exclusion of the study were subject's unwillingness to continue participation in the trial, not answering the questions, not ongoing participation in the sessions, presence of physical or mental diseases during the intervention period, possible incidence of adverse events during intervention and before collecting the second questionnaire data (three months after completing the intervention). The support group program was developed for 6 groups (five nine-member and one ten-member groups). This program was performed for each of the groups on a particular day of the week (ten sessions of 120 minutes each). To interact and communicate effectively with the participant, the researcher explained the pre-designed research objectives and methods 30 minutes before the program began. Then participants discussed the subject for about 70 minutes; during the last 20 minutes of the session the researcher classified the subjects. Due to importance of face-to-face communication, chairs were arranged in a circle. Topics of the sessions included:

_The first session: the menopause and its symptoms, stress, memory problems during menopause

_The second session: the meaning of happiness and social relationships and the effect of menopause on them

_The third session: purpose of the menopausal vasomotor symptoms and causes of them

_The forth session: the importance of sex with spouse in Islam, sexual signs in menopause period including abstain from sexual relations and pain during sexual intercourse

_The fifth session: vaginal dryness, consistency and appearance of the skin after menopause

_The sixth session: incontinence of urine while coughing or sneezing and frequent urination in postmenopausal women

_The seventh session: sleep disorders and their causes after menopause

_The eighth session: reduced physical strength and joint problems associated with menopause

_The ninth session: relaxation techniques, importance of relaxation training

_The tenth session: the importance of aerobic exercises and training

Three of the sample in support group (2 cases due to lack of attending the sessions and 1 due to moving to the other city) and 2 cases in control group (1 participant due to divorce and 1 due to use of hormone therapy during intervention) were lost; the number of participants in test and control group decreased to, respectively, 52 and 53. Data gathering tool was "Menopause specific quality of life (MENQOL) questionnaire"; demographic information was added to it, too. Demographic questions were closed questions and short answers about demographic variables including age and menopausal age of the case, height and weight, BMI, number of children (living or dead), education level, employment and economic status. This is a reliable and standardized questionnaire for assessing quality of life post-menopausal women, designed and standardized by Hiditch et al. in Toronto, Canada (5). MENQOL consisted of 99 closed questions (ratings rate from zero to six) in Likert scale which included 4 dimensions (3 questions on vasomotor, 7 questions on psychosocial dimension, 16 questions on physical dimension, 3 questions on sexual dimension). The total scores were calculated from the scores of QOL dimensions. Content validity was used to assess validity and the test-retest analysis was used to assess reliabilities of the questionnaire (r=0.084). According to scoring and points and number of questions (29 questions), Minimum and maximum scores for vasomotor, psychosocial, physical and sexual dimensions were, respectively, (3 to 24), (7 to 56), (16 to 128), (3 to 24); the total for life quality was (29 to 232). Scores close to maximum criterion indicated severity of the menopause symptoms and low quality of life. Demographic data and the questionnaire were prepared before the training started and three months after the last training session by going to participants' houses. The control group did not receive any intervention. Data were classified and analyzed by using SPSS/16. Qualitative variables were analyzed using chi-square tests and quantitative variables were analyzed using Mann-Whitney and Wilcoxon test, paired *t*-test and independent *t*-test

The Wilcoxon test and paired *t*-test were respectively used to compare "before" and "after" scores

of (respectively) vasomotor and psychosocial, physical and sexual dimensions. The first was used to Kolmogorov-Smirnov test (KS) for testing normality, based on scores before & after vasomotor dimension had abnormal distribution, so was used non parametric tests (Mann-Whitney and Wilcoxon test). Psychosocial, physical and sexual scores had normal distribution, so was used parametric tests (paired *t*-test and independent *t*-test).

The ethical issues in this study included introducing the researcher to the subjects, giving necessary explanation on content, getting written consent from the participants, informing them of the voluntary nature of participation in or withdrawal from the study and ensuring the confidentiality and privacy of information.

Results

The two test and control groups were matched in age, menopause age, BMI, education, employment and economic status, number of children (live or dead) before intervention and there were no significant differences (Table1). But after intervention there were great differences in scores of vasomotor (P=0.001, z=1.58), psychosocial (P=0.007, t=0.743), physical (P= 0.001, t= 3.797), sexual (P=0.001, t=0.383), and QOL score (P= 0.001, t= 4.422). Regarding support group participations, there was significant difference between the scores of these dimensions before and after comparison and QOL score after three months, but no significant difference was found in control group (Table 2).

Table 1: Demographic characteristics compared between postmenopausal women in test & control groups

Variable	Support group (52 cases)	Control group (53 cases)	*P*	Statistics
Age at time of study (years)	53.13±5.86	53±6.07	0.908	F*=0.007
Menopausal age (years)	49.33±5.16	49.07±5.32	0.799	F=0.658
BMI (kg/m²)	25.89±3.17	26.11±3.08	0.722	F=0.099
Employment status				
Housewives			0.770	**x^2=0.405
Employed	41(78.8%)	43(81.1%)		
	11(21.2%)	10(18.9%)		
Number of children				
Live				
Dead	4.13±1.77	4.43±1.57	0.628	F=0.476
			0.249	F=1.405
Economic status				
Poor			0.5	x^2=14.983
Moderate	4(7.7%)	20(37.7%)		
Good	34(65.4%)	27(50.9%)		
	14(26.9%)	6(11.4%)		
Education status				
Theological education degree	12(23.1%)	12(22.6%)	0.196	x^2=11.106
Elementary				
Middle school	19(36.5%)	26(49.1%)		
High school Diploma	12(23.1%)	9(17%)		
Academic	5(9.6%)	3(5.7%)		
	3(5.1%)	1 (2.7%)		
	1 (2.6%)	2(2.9%)		

* ANOVA results/** Chi-square results

Table 2: Comparison of mean & SD of QOL score before and three months after intervention in test and control groups

Groups	Support group		Statistics		Control group		Statistics	
Dimensions	Before Mean±S.D	After Mean±S.D	Result Test		Before Mean±S.D	After Mean±S.D	Result Test	
Vasomotor	19.92±3.74	14.94±4.24	*Z=6.053	*P*=0.001	18.32±5.90	18.00±5.62	*t*= 0.97	*P*=0.34
Psychosocial	38.7±10.91	28.63±10.21	**t*=9.708	*P*=0.001	34.60±12	34.14±11.53	*t*=0.58	*P*=0.56
Physical	79.03±18.89	57.19±14.55	*t*=15.320	*P*=0.001	70.55±20.86	70.22±20.59	*t*=0.479	*P*=0.63
Sexual	16.44±5.07	12.54±5.45	*t*=8.745	*P*=0.001	16.19±5.14	16.03±5.74	*t*=0.44	*P*=0.66
QOL	153.76±38.61	113.30±34.45	*t*=17.056	*P*=0.001	139.6±43.09	138.36±35.17	*t*=0.88	*P*=0.38

* Wlicoxon test results

** Independent t-test results

Discussion

This survey demonstrated the positive impact of 10-week consecutive structural program by using support group on quality of life and symptoms of menopause (vasomotor and psychosocial, physical, sexual dimensions). Support group method was used for learning in which learning was indirect. The results of this study are comparable to those reported earlier (8). A positive effect of using support group method on promoting women's attitudes towards menopause and its physical and psychosocial signs is reported. The current research evaluated the effect of support group intervention on vasomotor, psychosocial, physical, sexual dimensions; the effect of educational intervention on these 4 dimensions was positive. Although evaluating the effect of the intervention on women's attitude was not primary goal of the recent intervention. The effectiveness of this method was studied in postpartum distress physical and mental health of Alzheimer and psychotic patients' caregivers (8,15). Hey-Chung investigated the impact of support group program of postpartum distress of 60 women within 2-3 days of delivery (15), where implementation of this kind of intervention (similar to Hey-Chung's study in intervention method) has led to significant differences in vasomotor (hot flashes and night sweats) and sexual symptoms (vaginal dryness, abstain from sexual relations and changes in sexual desire), psychosocial and physical dimensions and quality of life. So it can be said that support group intervention not only has a positive effect on women on reproductive age but is effective in promoting QOL of postmenopausal ones and can help improve its signs. The problems of the research by Hey-Chung included lack of control group, difficulty of the content presented in the sessions; besides, as the authors acknowledged, content of the study was not proportionate to maternal educational level. While in current study appropriateness of the content with educational level has been taken into account, it was written in a clear manner with no medical terms. Herbert's study on physical and mental health of Alzheimer's caregivers indicated that, despite the 8-week intervention program, the participants showed a slight increase in knowledge and the intervention did not affect the other variables including behavioral indicators optimization (16).

Tong chen conducted a systematic review of researches on the effect of using support group method on psychotic patients' caregivers (caregivers of patients with schizophrenia and other psychotic disorders) and reported that instructional support group design had significant effect in mean score of stress, knowledge increase and better deal with these patients (20). Rostami made a semi-empirical study of direct education effect on the quality of life of postmenopausal women; the results indicated positive effect of lecture on promoting scores of sexual, physical and psychosocial dimensions but had no significant impact on vasomotor

score (12). Measured variables were similar to current research although the method used by Rostami was direct learning method. The difference between Rostami's study and ours included lack of control group, using direct method of teaching, impossibility of active participation of the samples in the issues, low education level of participants for implementation of educational program. Rostami used MENQOL questionnaire with 26 components. In most societies specific attention is focused on the problems of women during pregnancy but not on menopause problems in middle-aged and elderly women. Regarding constantly increasing number of this group of women (18,21) and lack of studies on proper learning styles (based on cultural and social context) it will be necessary to address the personal and social aspects of menopause problems which then helps to relieve its signs.

Limitations

Life style differences among participants, effectiveness of mass media educational programs, lack of knowledge about family structure such as marital life, nuclear and extended families as well as family conflicts. Considering the lack of research in this area and, also, increasing number of postmenopausal women, it is recommended to use available low-cost training methods including booklets and pamphlets.

Conclusion

Using the support group method will help to reduce the bothersome signs of menopause as well as vasomotor, physical, psychosocial and sexual symptoms. This will subsequently improve the quality of life. Considering the growing population of postmenopausal women, as the most vulnerable groups in society, it is recommended to uses support group as an effective method for promoting health of this social group.

Ethical considerations

Ethical issues (Including plagiarism, Informed Consent, misconduct, data fabrication and/or falsification, double publication and/or submission, redundancy, etc) have been completely observed by the authors.

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