



## Quality of life among Iranian postmenopausal women participating in a health educational program

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### Original Article

#### Abstract

**BACKGROUND:** Quality of life (QOL) in postmenopausal period has taken much attention especially in recent years, since almost one third of woman are living in postmenopausal age. The aim of this study was to determine the effect of health educational program among Iranian postmenopausal women.

**METHODS:** This quasi-experimental study was conducted in Sanandaj (Kurdistan, Iran). Forty menopausal women were recruited for the study. Data were collected using the Persian version of menopause-specific quality of life questionnaire (MENQOL) at the University of Toronto, Canada. After an initial evaluation and estimation of educational needs, educational intervention was performed weekly, for three consecutive weeks; each section lasted 45-60 minutes. The inclusive criteria were age of 45 years or older, married, residing in Sanandaj, having normal pressure and not using any types of alternative hormone therapy 6 months prior to the study.

**RESULTS:** Mean age was  $45.5 \pm 2.5$  years. Results showed that the mean score of QOL scale positively was affected by the health educational program.

**CONCLUSION:** This study showed that an appropriate training to menopausal women can improve their QOL and promote their health.

**KEYWORDS:** Education, Menopause Women, Quality of life

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### Introduction

Thousands of years ago, Roman philosopher, Lucius Annaeus Seneca (C.4 B.C-A.D.65) demonstrated importance of quality of life (QOL) by saying that "It is quality rather than quantity that matters".<sup>1</sup> The QOL in postmenopausal period has taken much attention especially in recent years, since almost one third of woman are living in postmenopausal age. QOL has been defined by

the World Health Organization (WHO) as the "individual's perceptions of their position in life in the context of the cultural and value systems in which they live and in relation to their goals, expectations, standards and concerns".<sup>2</sup>

Factors that may affect menopause onset have been described as genetic, race, habits, geographical region of habitual, socio economic and educational level.<sup>3</sup> Headache, trouble sleeping, mood swings, vasomotor, somatic and psychological symptoms of menopause affect all dimensions of QOL.<sup>4</sup> The duration, severity and impact of these symptoms vary from individual

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to individual, and population to population. Some women have severe symptoms that profoundly affect their personal and social functioning and QOL.<sup>5</sup> Many studies showed that some of demographic characteristics in postmenopausal women such as age, marital status, educational level, social and economical level, marriage satisfaction and the number of children who lived with the family were among other factors affecting the post-menopausal life.<sup>6-8</sup>

The timing of menopause as well as women's experience of menopausal symptoms varies between populations and within populations.<sup>9</sup> The mean age of menopause have been reported at 51 in the world, and regarding the increase in life expectancy in many countries, more than a third of women's time is in menopausal period. The importance of menopause is due to its association with various diseases and QOL.<sup>3</sup> According to Rajaeefard *et al.*, the mean age of menopause in Iran was calculated as 48.2 years.<sup>10</sup> Furthermore, Shahgheybi and Arya Nejad in Sanandaj showed that the mean age of menopause was 46.1 years.<sup>11</sup>

Evidence has shown that a woman's ability to cope with the stress of menopause can be enhanced through education and social support.<sup>7</sup> Therefore, the QOL is a multidimensional health concept, which mainly represents subjective symptoms that may influence the sense of well-being and day-to-day function.<sup>2</sup> The present study aimed to determine the effect of health educational program on QOL among Iranian postmenopausal women.

## Materials and Methods

A quasi-experimental was used for the guiding methodology. The research took place within a seven-month period in 2011. Study subjects were recruited from the Qods Health Care Center in Sanandaj, (Kurdistan, Iran). A convenience sampling method was used and forty menopause women were recruited for the study. The criteria for subjects selection were 45 years or older, married, residing in Sanandaj, having normal pressure and not using any types of

alternative hormone therapy 6 months prior to study. Ethical considerations were taken into account which included confirming the women's willingness to participate in the study, providing verbal consent and assuring that the data would be kept confidential and used only for the research.

For this study, QOL was assessed using the Menopause-Specific Quality of Life Questionnaire (MENQOL) proposed by Hilditch *et al.* at the University of Toronto, Canada.<sup>12</sup> Its Persian version validated among Iranian women population by Abedzadeh *et al.*<sup>5</sup> The questionnaire is composed of 29 items grouped in four domains: vasomotor, psycho-social, physical and sexual. Each item can be checked as non-present or present. In the later case, the item is graded according to its severity from 0 to 6. A mean score within each domain is generated according to each subject's response.<sup>5</sup>

After an initial evaluation and estimation of educational needs, educational intervention was performed weekly, for three consecutive weeks; each section lasted for 45-60 minutes. The content of the educational sessions were as the following: to give information about female genitalia and definition of menopause (the first session); to describe the symptoms and complications of menopause (the second session); and to offer some approaches in order to diminish menopausal complications (the third session). At the end of each session, the summary of the instructed program was delivered to the participants. Scores for QOL was evaluated and compared in two stages before the educational intervention and one month after the educational intervention.

One month after the intervention, the study subjects completed the questioners. Data were entered into SPSS for Windows (version 11.0, SPSS Inc., Chicago, IL, USA). Data was presented as means, standard deviation (SD) and percentages. Paired t-test was used in order to compare the mean scores for diverse criteria (total score of QOL before and after the educational program). P-value less than 0.05 was set as a significant level.

## Results

A total of 40 women participated in this study. Mean age of the participants was  $45.50 \pm 2.15$  years. Most participants described themselves as housewives (72%). The women differed in educational level and most were illiterate (47.5%). After educational intervention, t-test showed a considerable improvement in the mean score of participant's knowledge. Mean score of participant's knowledge before the education was  $13.70 \pm 2.92$  and it was  $17.0 \pm 2.4$  after the education (Table 1).

The score for vasomotor symptoms compared to the score prior to the intervention was improved ( $P = 0.05$ ). The score for psychosocial function was improved after the intervention. In addition, after the intervention, mean score of physical well-being compared to the base scores showed a statistically significant improvement. In term of sexual health, the study showed a statistically significant improvement (Table 2).

## Discussion

The aim of this study was to evaluate the effect of education on improving QOL. The result of the study showed that most subjects had a moderate level of knowledge before the intervention (educational program), therefore

the need for planning and implementation an educational program becomes more obvious. The findings of this study supported previous researches.<sup>13,14</sup> Since most of subjects in this study were illiterate, there is need to improve source of information such as media or healthcare centers' educational program.

The study showed that the vasomotor problem scores after the intervention were improved than those before, it can be concluded that intervention led to an improvement in vasomotor symptoms of the subjects. This finding was in accordance with previous studies.<sup>13-15</sup> Booth-Laforce *et al.*<sup>15</sup> reported a decrease in hot flashes following the practice of yoga. The result of study showed a statistically significant improvement in psychosocial well-being in the participants after the intervention. Therefore, the applied intervention led to improvement of psychosocial status in participants. This finding also was reported by Elavsky and McAuley.<sup>16</sup>

The study also showed that participants' physical health status improved after the intervention. This result was similar to the other studies.<sup>13,14,17</sup> Rotem *et al.* reported improvement in physical health status following implementing education in menopause women.<sup>17</sup>

**Table 1. Comparing the mean score for knowledge before and after the education**

Knowledge	Pre-intervention		Post-intervention	
	Number	Percentage	Number	Percentage
Low (Scores 0-8)	10	25	2	5.0
Moderate (Scores 9-15)	24	60	7	17.5
Good (Scores 16-21)	6	15	31	77.5
Total	40	100	40	100.0
Mean $\pm$ SD	$13.7 \pm 2.92$		$17.0 \pm 2.4$	

SD: standard deviation

**Table 2. Comparing the mean and standard deviation scores for four dimensions of quality of life (QOL) before and after the education**

QOL Dimensions	Pre-intervention		Post-intervention		Statistical tests Results
	Mean	SD	Mean	SD	
Vasomotor	2.05	0.66	2.67	1.18	$t = 0.77; P < 0.050$
Psychosocial	5.32	2.25	7.05	2.91	$t = 0.85; P = 0.340$
Physical	10.28	3.07	13.39	5.20	$t = 6.05; P = 0.001$
Sexual	0.64	1.18	1.04	1.54	$t = 0.44; P < 0.050$
Overall QOL	19.30	6.22	24.1	8.60	$t = 8.74; P = 0.001$

QOL: quality of life; SD: standard deviation

According to Osinowo in Nigeria, an improvement of self-perception marital satisfaction and sexual activity was observed after informing women on menopause.<sup>18</sup>

### Conclusion

QOL was improved significantly in the participants following the intervention. The finding of this study asserted that the four aspects of QOL well improved after the educational intervention, and the education can cause an improvement in the QOL by decreasing the problems of menopause stage and lowering their intensity. Therefore, the urgency of need to plan and implement an appropriate educational program is emphasized in order to promote the QOL among menopausal women.

Finally, the limited number of participants, and unfeasibility of categorizing them based on different age ranges were the limitations of the present study. Thus, broader studies with greater sample size, and different age ranges are recommended. In conclusion, this study was conducted to evaluate the effect of education on QOL and the improvement of health standards among menopausal women. The findings showed that an appropriate training to menopausal women can improve their QOL and promote their health.

### Conflict of Interests

Authors have no conflict of interests.

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