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IMPACT OF EDUCATIONAL SESSIONS ON MENOPAUSAL WOMEN QUALITY OF LIFE

[1] Rania Fekry, [2] T Marzouk [3], A El-Nemer

[1]Nursing specialist in Health Technical Institute in El-Mansoura city ministry of health

[2,3] Maternity and Gynecology Nursing, Faculty of Nursing, Mansoura University.

Email: monal_more1@yahoo.com

Abstract:

Aim: to evaluate the impact of educational sessions on menopausal women' quality of life. **Methods:** A quasi-experimental research design was utilized to conduct the study on 150 postmenopausal women working at the administrative offices of Mansoura University Hospital, they were divided into two groups: intervention group who received the awareness raising program about enhancing their quality of life and control group who did not provided with any education. Data were collected using two tools; interview questionnaire to assess the general characteristics of women at baseline and a modified Hilditch questionnaire to assess quality of life at baseline and three and six months after enrollment. **Results,** indicated that the total MENQOL scores were significantly decreased at 3rd and 6th months of enrollment compared to base scores in the study groups (109.2 ±19.3 at baseline, 84.6 ±31.9 at 3rd month and 70.9 ±31.9 at 6th month). **Conclusion:** it can be concluded that educational sessions were effective in reducing the total MENQOL score. **Recommendation** based on the study findings distribute such important information regarding improving menopause women quality of life among women in different sites & places and to raise the community awareness regarding menopause women needs for proper health information and care.

Key words: Education sessions, menopausal women, quality of life.

Introduction:

Menopause is a universal event in woman's life span, which occurs around the age of 50 years old in most developed countries. It can defined as absence of menstruation for more than one year that may reflects complete, or near complete ovarian follicular depletion and absence of ovarian estrogen secretion [(1).]

The decline in gonadal hormones during menopause gives rise to a wide range of physiological, psychological and sexual changes with the potential to significantly impact a woman's health and quality of life. Most notable among these are menopausal vasomotor symptoms, hot flushes and night sweats, along with mood, sleep disturbances and anxity[(2).]

An estimated 6,000 US women reach menopause every day. By the year 2020, the number of women who will be older than 55 years old is estimated to be 46 million. With increasing life expectancy, many women will spend up to 40% of their lives in the postmenopausal age. Approximately 55% of women going through menopause don't do anything at all to treat symptoms [(3).]

Considering the fact, lifespan is 84 years now, today women spend about one third of their life time after the menopause. It makes the post-menopausal as important as pre menopausal life. Post-menopausal women are one of the most ignored groups and there are few researches conducted on their quality of life [(4).]

Health education intervention strategy is one of the alternative strategies [(5)] for improving women's attitudes and coping

with menopausal symptoms identified as one of the sub-categories of health promotion programs [6]. It may promote the health behavior of the patients and their families and will change life threatening life styles [7].

Quality of life is the main goal of health care providers. It is a significant factor for individual health and it is used to plan and evaluate health care programs. Nurses can help in achieving the quality of menopausal women's life by providing education and counseling on menopausal symptoms management, such as bleeding, and other problems that may arise during this period [8].

Research hypothesis

Menopausal women, who attend educational sessions about improving menopause women quality of life experience, will experience better quality of life than those who do not.

Subjects and Method:

Research design: A quasi- experimental design was utilized.

Study Setting: This study conducted at a classroom in Mansoura University Hospital, Mansoura city. Data were collected between the periods of June 2013 to June 2014.

Subjects: One hundred fifty postmenopausal women who are working at the administrative offices of Mansoura University Hospital was recruited through purposive sampling technique. They equally divided into two groups: control and intervention group. The Inclusion criteria Contributed to this study were the postmenopausal woman with the following:

1. Experiencing one/more moderate to severe postmenopausal symptoms.
2. Do not use any kind of Hormone Replacement Therapy (HRT) 6 months prior enrolment.
3. Did not attended medical or nursing awareness raising program about the study subject.

Sample size calculation:

The sample size calculated according to the following formulae **(Senn, 2007)** [9]

$$n = 2(Z_{\alpha/2} + Z_{\beta})^2 \sigma^2 / \Delta^2$$

Tools of Data Collection:

Two tools were used for data collection.

Tool I. Interview questionnaire

The interview questionnaire *designed* to collect the necessary data from the enrolled women. It entails the following parts:

Part 1. General characteristics of the enrolled women including; age, occupation, educational level, marital status, residence and telephone number.

Part 2. Medical and surgical history of the enrolled women such as, hypertension, heart disease, diabetes mellitus or any surgical operation.

Part 3. Obstetric history of the enrolled women such as number of gravida, para, number of abortion, and obstetrical complication.

Part 4. Daily personal habits.

Tool II: Original Hilditch Questionnaire (MENQOL)

It concerned with scoring the quality of woman's life. Quality of life questionnaire for menopausal women contains four domains including vasomotor, psychosocial, physical, and sexual aspects. The investigator utilized 26 questions in this study out of a total items of 29 (2 questions on vasomotor aspects, 6 questions on psychological aspects, 16 questions on physical aspects and 2 questions on sexual aspects) [10].

Each respondent scored from 1-6 (score one if the respondent had no problem, score 2 if the respondent had a problem causing mild distress, score 3 if the respondent had a problem resulting into moderate distress, score 4 if the respondent had a problem that causes relatively severe distress, score 5 if the respondent had a problem causing severe

distress and score 6 if the respondent had a problem causing very severe distress).
Hereby, the total score for vasomotor aspects was from two to 12, psychological aspects score was from six to 36, physical aspects score was from 16 to 96 and for sexual aspects score was from two to 12. The total score of quality of life for each participant could be from 26 (the lowest level) to 156 (the highest level) points. The more the scores decreased, the better the quality of life became.

Ethical Considerations:

1. Ethical approval obtained from the Research Ethics Committee of Nursing Faculty-Mansoura University.
2. Informed consent obtained from all participants after explaining the aim of the study.
3. Participation in the study was voluntary and all participants had the right to withdraw from the study at any time without consequence.

Pilot Study:

Beginning from first to end of June 2013 on 10% of total sample size (n=15) to test their applicability and to estimate the time needed to complete each tool. Based on the pilot study few words modified .

Field Work:

- The intervention group: received awareness rising program that developed by the researcher after literature review. It entails three teaching sessions, discussion, demonstration and redemonstration that conducted at a classroom in Mansoura University Hospital; each session took one hour. The first session included definition of menopause, transition to menopause, symptoms and complications of menopause, while the second session concerned with self care of menopausal symptoms. Moreover, during the third session the participants provided by variety of approaches that contributes to improving quality of woman's life; including but not limited to healthy diet, exercise and relaxation techniques.
- The program provided to 15 groups; each group encompassed five eligible women. The program took about three hours weekly divided on three consequent days every week until sample size completed. Media used was illustrative pictures and a video for relaxation techniques showed to the participants in the study groups.
- The control group received no education and they had no contact with the intervention group beyond recruitment until data collection.
- The data were collected through three phases. The data of assessment. At the first phase; the interview Questionnaire and Hilditch Questionnaire filled in prior to the awareness raising program, and then using the same original Hilditch Questionnaire the 2nd, and 3rd phase assessment done three months and six months after the awareness raising program respectively.

Limitations of the study:

1. Asking the participants to wait after duty hours was difficult.
2. Differences in life styles and educational level of the subjects led to consuming more effort to make effective teaching cession.
3. Lack of national references related to this subject results in poor national references in the discussion section.

Results:

Table 1 shows frequency distribution of socio demographic characteristics among the intervention and control groups. It is clear that there were no statistically significant differences observed among the two groups concerning age, BMI, education level, occupation and residence, marital status and number of family member.

Table 2 shows MENQOL total scores among the control and intervention groups

at baseline, three months and six months after the awareness program. The MENQOL total score decreased in the intervention group three months after providing the education program relative to that at the baseline 84.6 ±31.9 compared to 109.2 ±16.4 in the control group. Six month after the awareness program the total MENQOL scores in the intervention group was further lower than that of the control group (70.9 ±31.9 versus 112.9 ±21.1 respectively). These differences were highly significant p=<0.001).

Figure1 shows the correlation between the marital status and quality of life total score after 6 months of the studied sample. The MENQOL total score after 6 months shows significant association with the marital status (r=2.603 and p=0.011).

Figure 2 illustrates the association between the BMI and the MENQOL total score at 6 months of the intervention group. The MENQOL total score at 6 months shows significant association with BMI (r=0.273, p = 0.018).

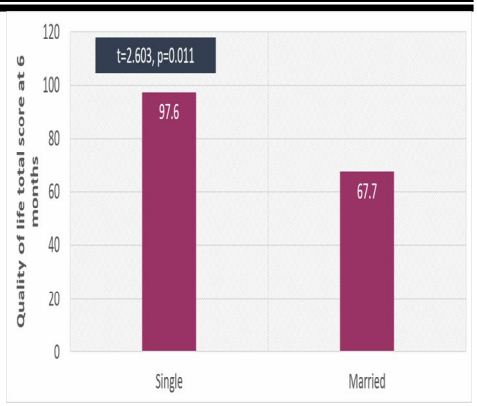

Figure1 the association between the marital status and the MENQOL total score at 6 months of the intervention group.

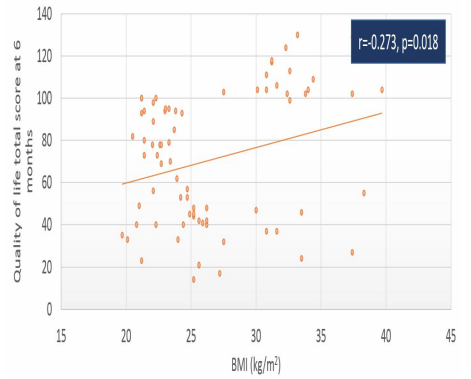

Figure2 the association between the BMI and the MENQOL total score at 6 months of the intervention group.

Table1. Comparison of the Socio-demographic data between the intervention and control groups

Variables	Intervention group	Control group	Student's t test	P
Age (years) Mean ±SD	49.9 ±3.7	49.3 ±4.1	1.060	0.291
BMI (kg/m^2)	27.4 ±4.2	26.9 ±4.1	0.7377	0.4618
Educational level **(n, %)** Primary/Preparatory	5 (6.7%)	9 (12%)	3.379*	0.185
Secondary	37 (49.3%)	43 (57.3%)		
University	33 (44%)	23 (30.7%)		
Occupation (n, %)				
Worker	5 (6.7%)	10 (13.3%)	1.852*	0.174
Employee	70 (93.3%)	65 (86.7%)		
Residence (n, %)				
Rural	45 (60%)	48 (64%)	0.255*	0.614
Urban	30 (40%)	27 (36%)		
Marital status (n, %)				
Single	8 (10.7%)	11 (14.7%)	0.542*	0.461
Married	67 (89.3%)	66 (85.3%)		
Number of family members	5.4 ± 2	5.7 ±1.6	1.085	0.280

* Chi square test, single includes divorced or widowed women.

Table 2. QOL of menopausal women between the intervention and control groups

	Intervention group Mean ±SD	Control group Mean ±SD	Student's t test	
			t	P
At baseline				
Vasomotor domain	8.4 ±2	8.1 ±1.6	0.936	0.351
Psychological domain	24.5 ±5	24.4 ±4	0.217	0.828
Physical domain	67.8 ±11.5	65 ±9.1	1.656	0.100
Sexual domain	8.5 ±1.9	8.2 ±1.7	0.724	0.470
Total score	109.2 ±19.3	105.7 ±14.7	1.233	0.220
After 3 months				
Vasomotor domain	6.3 ±2.9	8.5 ±1.6	5.567	<0.001
Psychological domain	18.7 ±7.9	25.2 ±4.2	6.284	<0.001
Physical domain	53.1 ±19.3	66.7 ±10.1	5.414	<0.001
Sexual domain	6.5 ±2.9	8.8 ±1.9	5.852	<0.001
Total score	84.6 ±31.9	109.2 ±16.4	5.938	<0.001
After 6 months				
Vasomotor domain	5.2 ±2.9	8.8 ±2.1	8.762	<0.001
Psychological domain	15.8 ±7.6	26.1 ±5.3	9.654	<0.001
Physical domain	44.7 ±19.3	69 ±12.9	9.068	<0.001
Sexual domain	5.2 ±2.9	9 ±2.1	9.127	<0.001
Total score	70.9 ±31.9	112.9 ±21.1	9.515	<0.001

Table2. MENQOL total score at baseline, after 3 months and after 6 months after the education program among the intervention and the control groups

Discussion:

This study aimed to evaluate the impact of the awareness sessions on menopausal women's quality of life. The current study findings showed no significant difference between the intervention and control groups at baseline; in terms of general characteristics, obstetric history, menstrual history, medical history and daily habits. Additionally, these findings revealed that the intervention group who received awareness raising program on the quality of life had better quality of life than the control group three months after enrollment. Such findings supported the study hypothesis.

The present study provided a comprehensive approach of raising quality of life experiences. It was entailed nutrition counseling, physical exercise training and behavior modification instructions. Similarly, **Rotem et al. (2005)** examined the impact of educational intervention over three months on a group of Palestinian menopausal women by conducting workshop based training on practical solutions to improve menopausal symptoms and concluded that the physical, spiritual and social dimensions scores showed improvement leading to a better quality of life in the three dimensions of health [11].

Additionally, **Forouhari et al. (2010)** assessed the effect of three months education program on the quality of life they found a statistically significant difference among the study and control groups in their QOL score three months after the educational intervention for vasomotor symptoms, psychosocial aspect, physical wellbeing, sexual health and total QOL score. The mean QOL scores in the study and control groups were 84.6 ±31.9 and 109.2 ±16.4; respectively [12].

A longer study extended to six months assessed the effect of educational program on the quality of life **Aslan et al. (2008)** stated that the intervention group showed a highly significant decrease in quality score between pre intervention and 8 weeks evaluation, as well between pre intervention, 8 weeks and six month evaluation($p=0.000$ and $p=0.112$ respectively [13].

In non comprehensive training program concerned with physical exercise training only **Elavsky et al. (2007)** and **Preethi Cony Pinto (2012)** studied the effect of physical exercise on QOL and noted a significant improvement in QOL scores after three months of physical exercises among menopausal women[14,15].

Parallel with these studies findings **Villa Verde et al. (2006)** examined the effect of one year exercise training program conducted twice weekly on a small sample size and noted a statistically significant difference in HRQOL between pre and post intervention in the experimental group. A positive change was observed in all scales for the experimental group and a negative change in all scales for the controls. **Pooraghaei et al. (2009)** stated that the training program had a significant effect on subjects' quality of life but not on all domains [16,17].

The present study stated that spouse women significantly associated with better QOL scores compared with those without husband. **Bouzari et al. 2013** reported that psychosocial and physical domains of QOL in married women are better than in single women and multiple logistic regression analysis showed that marital status was independent risk factors for psychosocial domain [18].

The findings were similar to that of **(Ehsanpour et.al 2007)** [19] who also reported that there was a correlation between marital conditions and psychological and sexual QOL and **(Yakout et al 2011)** [20] observed poor quality of life for the subjects who lived alone. Other studies showed that marital status affects quality of life

(Madhukumar et al. 20 12 and Alizadeh-Charandabi et al. 2012). [21, 22]. Conversely, other authors reported that marital status did not have any association with QOL **(Elsabagh et al 2012),** On the same line **(Masoumeh et al. 2011)** study noticed that marriage satisfaction had association only with psychosocial domain of QOL [23].

There is a high association between BMI and MENQOL total score. On the same line **Huang et al. (2010)** mentioned that lower weight, BMI and abdominal circumference have been associated with a reduction in vasomotor symptoms, improves psychological well-being, HRQOL,self-esteem and health practices[24].

Conclusion:

The present study findings indicated that the total MENQOL scores were significantly decreased at 3rd and 6th months of enrollment women compared to base scores in the study groups. Thus, it can be concluded that awareness educational sessions were effective in reducing the total MENQOL score or improving the quality of life among the menopause women.

Recommendations:

Based on the findings of this study, the following recommendations are suggested:

- Planning and implementing appropriate awareness programs is emphasized in order to promote the quality of life in menopausal women in the primary healthcare setting and for any site and places.

Further research

- Nurses can offer such a awareness program, thereby making a valuable contribution to improving women's health in the community.
- More effort from health care providers to start further researches about the quality of life of menopausal women at high risk for aggressive symptoms.

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