Effectiveness of Psycho educational Program on Depressive Symptoms and Marital Satisfaction among Menopausal Women

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Abstract

Background: Menopause is a major turning point in a woman's life and have many changes especially in mood and marital satisfaction. **Aim of the study:** This study aimed to evaluate the effectiveness of psycho-educational program on depressive symptoms and marital satisfaction among menopausal women. **Design:** A quasi-experimental design two-groups (pre and post-test) was used to achieve the aim of the study. **Setting:** This study was conducted at administrative building of Benha university hospitals. **Sample:** A convenience sample of 100 menopausal women divided into two equal groups (50 study groups and 50 control groups) was selected from the above mentioned settings. **Tools for data collection:** Data were collected by using four tools. I: Structured interview questionnaire to assess socio-demographic and clinical characteristics. II: Overall menopausal symptoms scale. III: Beck depression inventory scale and IV: Marital Satisfaction Scale. **Results:** There was a highly statistical significant reduction of all items of menopausal symptoms & the level of the severity of depressive symptoms for study group & also marital satisfaction improved after program application among study group than preprogram. Also, there were highly statistically significant positive correlation between total menopausal symptoms and total mean score of beck depression scale, negative correlation between total marital satisfaction and total depressive symptoms and negative correlation between total marital satisfaction and total menopausal symptoms of studied menopausal women pre and post-program application. **Conclusion:** The psycho education program succeed to decrease menopausal symptoms, depressive symptoms and enhance marital satisfaction among studied menopausal women. **Recommendation**: Stress management and assertiveness training program and social skill training program should be given for all menopausal women to relieve their psychological problems and enhance their coping patterns.

Keywords: Depressive Symptoms, Marital Satisfaction, Menopausal Women and Psycho-educational program

Introduction

Women's health at different age groups is an important issue to reach the efficiency to perform all duties according to responsibilities and to increase the productive capacity which will consequently promote the national economy. Menopause can influence the women's satisfaction and well-being. Menopause is a physiological event that leads to physical-psychological-social consequences in women's lives and thus affects their life. According to the World Health Organization (WHO), menopause is the cessation of menstruation in women that occurs due to the cessation of ovarian follicular activity (for 12 consecutive months) without any pathological reason and leads to the end of pregnancy in women. Menopause is resulting from estrogen deficiency. The median age of menopause is 51years. Menopause affects many areas of

the body, such as urogenital, psychogenic, and cardiovascular and women are spending up to one-third of their lives in the menopause **(Falkingham et al., 2021).**

Approximately, 75% of women experience vasomotor symptoms. These symptoms include hot flashes, night sweats, palpitations, and migraines. Hot flashes often last approximately three to four minutes at unpredictable intervals. Approximately 60% of women experience urogenital symptoms. These symptoms include vaginal atrophy, urethral atrophy, and sexual dysfunction (i.e., a decline in libido). Vaginal atrophy results in dryness, pruritus, and dyspareunia (painful intercourse). Urethral atrophy results in stress incontinence, frequency, urgency, and dysuria. Approximately 45% of women experience psychogenic symptoms these symptoms, include anger/irritability, anxiety/tension, and depression, and sleep disturbance, loss of concentration, and loss of self-esteem/confidence **(Peacock et al., 2021).**

Depression is a prevalent and impairing mental health disorder that affects women nearly twice more than men. Studies reported that women are more vulnerable to depression especially during the transition to menopause, levels of the estrogen hormone drop, causing wide-ranging changes throughout the body. Many of these changes have direct connections to menopausal mood swings, irritability, loss of interest or pleasure, fatigue, loss of energy, and sleep disturbances. Studies show cause of this changes there drop in estrogen is thought to affect the way the body manages serotonin and norepinephrine, two substances that have been linked to depression **(Khoshbooii et al., 2021).**

Healthy marital relationship is the ideal constitutions in any society, but marital satisfaction is not easily achievable and its maintenance requires the efforts of couples throughout the common life. The changes in the health condition of the women and changes result in menopause stage, which is considered as an effective component in reducing marital satisfaction. Menopause is one of the most challenging events in the women's lived experience in the aging process, which is associated with a variety of challenges in the couple's health and their marital relationships. When women talk to their husbands about their menopausal symptoms' they expect their spouses to understand them and participate in their care process. The men's inability to support and solve their wives' problems or this women avoid talk about this stage with other and isolated all this can lead to a decline in marital satisfaction **(Yarelahi et al., 2021).**

Furthermore, psycho educational program is very effective in providing information about the disease, its treatment and how to cope with it. The goals of psycho education not only behavioral change which leads to better treatment adherence but also, thought change which leads to better performing daily activity and hence better life. Women need to be well informed about health issues so that they can have a say in health-care decisions concerning themselves and the protection of their health. Health education intervention could be an alternative way for coping with menopause symptoms **(Koyuncu et al., 2019).**

The women who have sufficient knowledge about the symptoms of menopause, they have better tolerate the complications of this period and will prevent the occurrence of serious and irreversible complications with appropriate treatment. Due to the importance of health during menopause, using education based on empowerment model, can promote health-promoting behaviors in women and help improve their quality of life (**Hashemian et al., 2020).**

Nurses have an important role in modifying lifestyle through health education, supporting the services linked with all areas of women's care and finally facilitating a better understanding and potential health implications of a well-managed menopausal women's health among all nurses coming in contact with women **(Norton and Tremayne , 2019).** Nurses should be able to recognize needs of menopausal women and give education to maintain health into longer life, regardless of symptoms by giving general health advice, in relation to reducing the risks through diet, exercise and basic strategies of healthy lifestyle. Nurses should support positive attitudes and have good awareness about preventive programs and risk factors that increase the risk of physical ill health **(Lundström et al., 2020).**

Significance of the study

Menopause occurs naturally in most women between ages 45 and 52 years and is marked by changes in hormonal status and the cessation of the menstrual cycle. By 2025, worldwide, the number of menopausal women is expected to rise to 1.1 billion. Approximately 1.2 billion women worldwide will be menopausal or postmenopausal by the year 2030, with 47 million new entrants each year. In Egypt, the mean age of the menopause is 46.7 years. More than 85% of these women will experience problematic symptoms, including hot flashes, night sweats, sleep disturbances, sexual dysfunction, mood disorders, weight gain, and cognitive declines **(Johnson et al., 2019).**

Depression is considered among the most burdensome disorders worldwide. The prevalence of depression in menopausal women has been reported to vary between 15.8 and 40% Depression is a common psychological condition and estimated to affect 350 million worldwide populations **(Alanazi and Aldughaither, 2019).** Depressive symptoms are frequent in all populations but seem to rise among women in menopause. Psychological problems, especially depression, are one of the main problems influencing menopausal women in several communities. The prevalence of depression, the most recurrent mood disturbance is reportedly 43% during menopause **(Mohamoud and Mohammed, 2018).**

Nearly 40% of the menopause women suffer from marital dissatisfaction. Studies have shown that the incidence of marital dissatisfaction is 33-88% among the middle-aged women. Aging and menopause process are two main factors that simultaneously cause marital dysfunction in the menopause women. By aging, the women's sexual problems increase, reaching to its climax within the age of 45-65 years **(Tavoli et al., 2021).**

Aim of the Study

The present study was carried out to evaluate the effectiveness of psycho-educational program on depressive symptoms and marital satisfaction among menopausal women. This aim will be achieved through:

-Assessing depressive symptoms and marital satisfaction among menopausal women.

-Designing and implementing psycho educational program for menopausal women.

- Evaluating the effect of psycho educational program on depressive symptoms and marital satisfaction among menopausal women.

Research Hypothesis:

Psycho educational program implementation on study group of menopause women would have positive effect on depressive symptoms and enhance marital satisfaction than control group of menopause women.

Subject and Methods

Research Design:

A quasi-experimental design two-group (pre and post-test) was used to achieve the aim of the study.

Research Setting:

This study was conducted at administrative building of Benha university hospitals. It Qalubia Governorate, which is affiliated to the Ministry of High Education, It is the main building of administrative affairs and is composed of 4 floors. The building comprises a homogenous group of clerks nearly of comparable ages and wages, this lead to the formation of a homogenous group which is suitable for the current study. These hospitals consist of three building (administrative building, surgery building and abdominal building).

Subjects:-

A convenience sample constituted the study subject. The number of menopausal women will be around 100 menopausal women divided into two equal groups (study group comprising 50 menopausal women and control group comprising 50 menopausal women meet the following criteria

1- Age 45-60 years old
2- Free from any organic brain disorders and other psychotic disorder
3- Willing to participate in the study
4- Married women

Data collection instruments: In order to achieve the aims of the study, the following tools were used:-

Tool one: A structured Interview Questionnaire which developed by the researcher & consists of two parts:

Part 1: Socio-demographic data: To elicit data about menopausal women characteristics such as age, residence, level of education, monthly income.

Part II: Clinical data: which includes age of first period "menarche" duration of menopause, duration of marriage, is there health problems, is there any psychological problems.

Tool two: Overall Menopausal Symptoms Scale. This scale was originally developed by the researcher under supervisor's opinion and based on review of literature to measure menopausal symptoms. It was translated into Arabic by the researcher and tested for its validity and reliability. This scale is composed of 22 items in the form rating scale ranging from (1-3). Scores for responses (No - Sometime - Yes). The items are divided into four subscale, 9 items to measure physical symptoms, 5 items to measure psychological symptoms, 3 items to measure sexual symptoms and 5 items to measure Social symptoms.

The scoring system was as follow: Less than 12 means no menopausal symptoms, 12 – 24 means mild menopausal symptoms, 25 – 37 means moderate menopausal symptoms and 38 – 66 means severe menopausal symptoms

Tool Three: Beck Depression Inventory Scale (BDIS): This scale was originally developed by **Beck (1966)** to measure depressive symptoms. It was translated into Arabic by the researcher. It includes 21 questions in the form of likert scale. Each question ranged from 0-3 grade.

Scoring system of depressive symptoms scale was categorized as follows: 0-13 indicates no depression, 14-19 indicate mild depression, and 20-28 indicate moderate depression and 29 -63 indicate severe depression

Tool Four: Marital Satisfaction Scale was developed by **Funk & Rogge, (2007)** to measure the degree of marital Satisfaction. It was translated into Arabic and modified by the researcher. This scale is composed of 32 items but after modified by jury of five experts of psychiatric mental health become composed of

48 items in the form rating scale ranging from (1-3). Scores for responses (Rarely - Sometimes -Most time). This scale contains positive and negative sentences. The items are divided into six subscale, 8 items to measure marital satisfaction from an economic point of view, 8 items to measure marital satisfaction from emotional communication, 8 items to measure sexual satisfaction, 8items to measure marital satisfaction in terms of the field of family problems, and 8 items to measure marital satisfaction in terms of the area of spending time and 8 items to measure marital satisfaction in terms of the scope of tasks and roles.

Scoring system of marital satisfaction scale was categorized as follows: <50%: indicate poor satisfaction and >50%-74%: indicate good satisfaction and >74%: indicate high satisfaction

Content Validity and Jury:

Content validity of tools was carried by a Jury of five experts of Psychiatric Mental Health Nursing and Medical field. Two of them were specialized in the Psychiatric Medicine and the others (three) were specialized in the Psychiatric Nursing field to check the relevancy, clarity, comprehensiveness, and applicability of the questions. According to their opinions, modifications were done as, Modification of some words of Arabic form of marital satisfaction scale to give the right meaning of the phrase , Adoption of marital satisfaction Scale to be 48 items rating scale. This modification was done with the objective of its accuracy and consistency, to include all required content

Reliability of the tool:

Test-retest reliability was applied for tool (over all menopausal symptoms scale, Beck Depression Inventory Scale and marital satisfaction Scale). The tools proved to be strongly reliable (r. = 0. 87, 0.92 and 0.95) respectively.

Ethical Consideration:

Before conducting the study an oral consent was obtained from each participant to be involved in the study after explaining the purpose and importance of the study. The subject who agreed to participate in the study was reassured about confidentiality and anonymity of their obtained information throughout the study. They were informed about their right to refuse to participate in the study and the right to withdraw from the study at any time without giving a reason.

Pilot Study:

Before starting data, collection a pilot study was conducted on 10% of the subjects (10 menopausal women). The purpose of the pilot study was to test the clarity, applicability, feasibility, objectivity of the study tools, and it served to estimate the approximate time required for interviewing the menopausal women as well as to find out any problems that might interfere with data collection.

Field work:

General Objectives of the psycho-educational program:-

At the end of the Psycho-educational Program implementation, the following must be achieved for menopausal women:

1- Decrease menopausal symptoms, depressive symptoms and enhancing marital satisfaction.

2- Helping menopausal women to be able to live and to accept others without resorting to escape.

3- Helping menopausal women to create a new life through the skills they have learned and interact with others through new life style.

Specific Objectives of psycho-educational nursing program:

At the end of the psycho-educational program implementation the menopausal women will be able to:

1-Identify menopausal stage and its causes.

2- Recognize signs and symptoms of menopause

3- Recognize physical, psychological, social effects of menopausal stage on women.

4- List phases of treatment and life style that relieve menopausal symptoms.

5- Recognize marital problems resulting from menopausal stage

6- Define marital satisfaction and its dimensions

7- Training on how to improve marital satisfaction in menopausal women

8- Discuss depressive symptoms associated with menopausal stage and its causes

9- List methods to overcome depressive symptoms of menopausal stage

10- Training on how to replace negative thoughts with positive ones through self-monitoring training and role-playing training

11- Training on how to replace negative thoughts with positive ones through training on stopping thoughts, training in self-dialogue and training on improving feelings.

12- Discuss various relaxation methods to relieve depressive symptoms.

13- Applying relaxation techniques, Deep breathing exercise and Imagination

Psycho-education program consist four phases:

1- Assessment phase (Data collection Pre-test):

Data collection of this study was being carried out at administrative building at Benha University Hospital, Qaluobia Governorate. Comfortable place was chosen for interviewing the menopausal women, orientation was done about the purpose and the content of the nursing intervention program, each menopausal women was interviewed individually where pre- test was carried out using the decided tools for data collection the pre-test was collected two days per week (Sunday and Tuesday at 10 a.m. to 12p.m) through while average of 5-10 patients interviewed per day. Each interview lasted for 20-25minutes, depending on the response of interview. The process of data collection took 2 month a period from beginning of July-2020 to beginning of September-2020.

11- Planning phase: the researcher identified the important needs for target group, set priorities of needs, goals and objectives were developed.

111-Implementation of the Program:

The researcher implemented Psycho-educational Program for the study group (50 menopausal women), this group was divided into 10 subgroups; each subgroup composed of 5 menopausal women. The program consisted of 12 sessions of 10 hours (2.5 hours for theoretical sessions and 7.5 hours for practical sessions). Each subgroup received 12 sessions of psycho-educational program. Sessions was implemented two day per week for 30 minutes to 60 minutes for each session at Monday and Tuesday every week. The sessions of psycho-educational program were carried out in 7.5 months during the period of (beginning of October-2020 to half of may-2021) about 1.5 months to two groups to finish program. Researcher work with (10 subgroup 2days/week).Each subgroup composed of 5 menopausal women.

- Teaching methods: All menopausal women received the same program content using the same teaching methods, there were group discussion, brain storming, demonstration, real situation, re-demonstration , modeling, role play)

- Teaching aids (Media): - Suitable teaching aids were specially prepared for intervention as colored picture, brochure, booklet and videos and handout

Methods of evaluation: - Feedback through oral questions, re-demonstration, positive participation, direct observation, role plays.

1V- Evaluation Phase (post-test). This phase aimed to estimate the effect of psycho-educational program on improvement of depressive symptoms and marital satisfaction on menopausal women. After the conduction of the psycho-educational program sessions for the study group a post-test questionnaire which was the same formats of pre-test was done for study group using the pervious assessment tool for data collection (tool two, tool three and four for data collection) to compare the effect of the program in pre post intervention.

Statistical analysis:

Analysis of the data was carried out and the collected data were organized, computerized, tabulated and analyzed by using the Statistical Package for Social Science (SPSS) version 20. Data analysis was accomplished by the use of number, percentage distribution, mean, and standard deviation. Paired t-test was used to compare means within group, and t-test was used to compare two independent means. A significant level value was considered when p- value=<0.05. Significance levels were considered as follows: Highly statistical significant p≤0.001** but Statistical significant p≤0.05*, in while Not significant p>.05

Results:

Table (1): Reveals that there is no statistical significant relation between study and control group regarding socio-demographic characteristics (age, residence, education level and monthly income) p>0.005.

Figure (1): Shows that there is reduction of the level of the severity of depressive symptoms to 0% among study group post program application compared to preprogram application 28%.

Figure (2): Shows that marital satisfaction is improved among study group after program application to 92% than preprogram application 2%.

Table (2): Illustrate that there is no statistically significant difference between study and control group regarding to all items of menopausal symptoms before program application, while there are statistical significant differences of all items of menopausal symptoms between study group and control group post program.

Table (3): Illustrates that there are highly statistical significant negative correlation between total marital satisfaction and total depressive symptoms of studied menopausal women post-program application (p≤ 0.001).than preprogram which is insignificant

Table (4): Illustrates that there are a highly statistically significant negative correlation between total marital satisfaction and total menopausal symptoms of studied menopausal women pre and post-program application (p≤0.001).

Table (5): Shows that there are highly statistically significant positive correlations between total mean score of menopausal symptoms and total depressive symptoms of studied menopausal women pre and post-program application (p≤0.001)

Table (1): Comparison between socio-demographic characteristics of study and control group of menopause women preprogram (n=50 for each group)

Group / Socio-demographic	Study group (n=50)		Control group (n=50)		X2	p-value
	No	%	No	%		
Age (years)						
From 45to less than 50	20	40.0	20	40.0	0.071	.965
From50 to less than 55	18	36.0	19	38.0		
From 55to 60	12	24.0	11	22.0		
Mean ±SD	**49.81±5.23**					
Residence						
Rural	32	64.0	30	60.0	0.170	.680
Urban	18	36.0	20	40.0		
Level of education						
Primary education	3	6.0	3	6.0	0.254	.881
Secondary\Diploma education	38	76.0	36	72.0		
High graduate	9	18.0	11	22.0		
Monthly Income						
Enough	30	60.0	28	56.0	0.164	.685
Not enough	20	40.0	22	44.0		

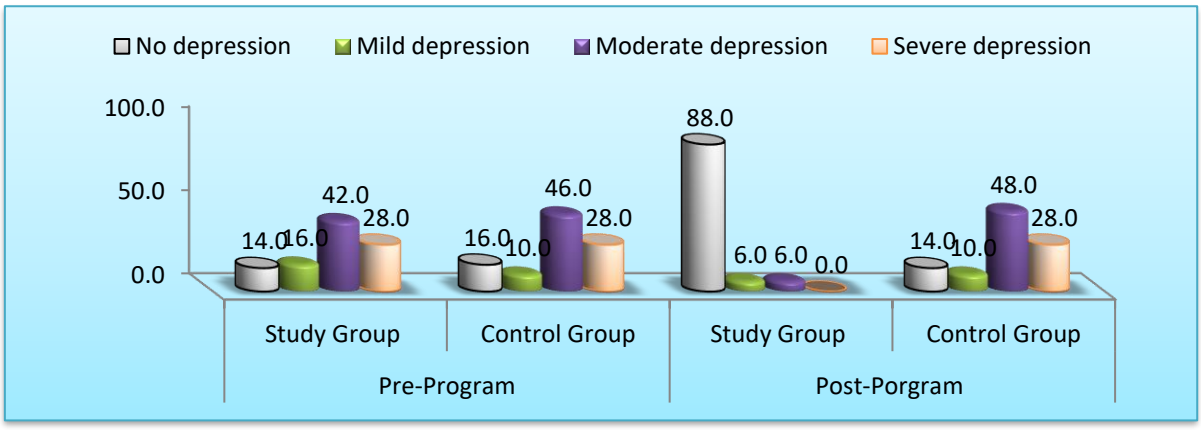

Figure (1): Comparison between study and control group of menopausal women regarding to depressive symptoms pre and post program (n=100).

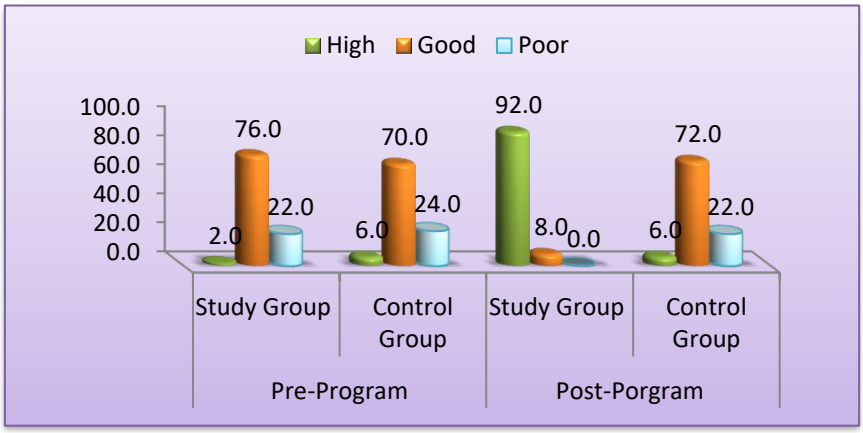

Figure (2): Comparison between study and control group of menopausal women regarding to total marital satisfaction pre and post program (n=100).

Table (2): Comparison between study and control group of menopausal women regarding to total items of menopausal symptoms pre and post program (n=50 for each group).

Group phases / Menopausal symptoms	Score	Before program application				X2	p-value	After program application				X2	p—value
		Study group n=50		Control group n=50				Study group (n=50)		Control group (n=50)			
		No	%	No	%			No	%	No	%		
Physical symptoms	Yes	27	54.0	26	52.0	0.229	0.892	11	22.0	26	52.0	17.23	0.000**
	Some times	11	22.0	13	26.0			6	12.0	13	26.0		
	No	12	24.0	11	22.0			33	66.0	11	22.0		
psychological symptoms	Yes	32	64.0	31	62.0	0.059	0.971	12	24.0	31	62.0	26.88	0.000**
	Some times	11	22.0	12	24.0			10	20.0	12	24.0		
	No	7	14.0	7	14.0			28	56.0	7	14.0		
Sexual symptoms	Yes	31	62.0	29	56.0	0.167	0.920	10	20.0	29	56.0	41.65	0.000**
	Some times	9	18.0	10	20.0			7	14.0	10	20.0		
	No	10	20.0	11	22.0			33	66.0	11	22.0		
Social symptoms	Yes	25	50.0	25	50.0	0.325	0.850	0	0.0	25	50.0	47.42	0.000**
	Some times	12	24.0	10	20.0			3	6.0	10	20.0		
	No	13	26.0	15	30.0			47	94.0	15	30.0		

Table (3): Correlation between marital satisfaction and mean score of beck depression scale among studied menopausal women (study group) pre and post program

Total Marital Satisfaction	Total Depression Scale			
	Before program application		After program application	
	Study group(n=50)		Study group(n=50)	
	R	p-value	R	p-value
	-0.381	0.006	-0.526	0.000**

Table (4): Correlation between marital satisfaction and total menopausal symptoms among studied menopausal women (study group) pre and post program

Total Marital Satisfaction	Total menopausal Symptoms			
	Before program application		After program application	
	Study group(n=50)		Study group(n=50)	
	R	p-value	R	p-value
	-.511	.000**	-.514	.000**

Table (5): Correlation between total menopausal symptoms and total depressive symptoms among studied menopausal women (study group) pre and post program

Total Menopausal symptoms	Total Beck Depression Scale			
	Before program application		After program application	
	Study group(n=50)		Study group(n=50)	
	R	p-value	R	p-value
	0.540	0.000**	0.744	0.000**

Discussion

Menopause represents a critical life stage encompassing a range of physiological and psychosocial changes that require adaptions to optimize health and functioning. The results of the present study cleared that there was no statistically significant difference between the study group and the control group regarding (age, residence, educational level, and monthly income). From the researcher point of view, these might be due to homogeneity of the study population. This result agrees with **Forouhari et al., (2015)** reported that the two groups had no significant differences between the study and control groups in demographic characteristics such as (age, level of education, and the mean age of menopause).

Also, the result of current study agree with **Jafarbegloo et al., (2019)** reported that there no significant difference between two groups in terms of the demographic variables. This result of current study confirmed with **Yarelahi et al., (2021)** revealed that there was no significant difference between the intervention and controls groups in terms of socio-demographic variables.

In addition to, the present study agreement with **Yoshany et al., (2019) and Sis Çelik and Pasinlioğlu (2019)** revealed that there were no significant differences between the two groups in terms of socio-demographic variables. Stated that there were no significant differences regarding demographic characteristics.

This result is in accordance with **Afshari et al., (2020)** and **Bahri et al., (2020)** reported that the two groups had no significant differences in demographic characteristics such as age and level of education.

The present study showed that there was highly statistically significant difference between control and study group regarding to all items of menopausal symptoms after program application and showed that there was reduction in level of the severity of menopausal symptoms among study group after program application compared to pre-program application. From the researcher point of view, this indicates the effectiveness of the program session which was within the need and interest of the participants.

This result supported with **Sankar et al., (2020)** who showed that there was statistically significant difference between control and study group regarding to all menopausal symptoms after program application education and reduction in menopausal symptoms in the study group post program than preprogram . Also, **Elavsky and Mcauley (2017)** concluded that there were a significant difference between the study and controls group after intervention and showed that an improvement following physical exercise in menopause women significant in study group in physical health status and **Heidari et al., (2018)** supports the result and found that there was a significant difference in the score in case group before and after intervention.

This result consistent with **Hashemian et al., (2020)** who illustrated that reduction of menopausal symptoms can be followed by the implementation of educational programs and improvement of health-promoting behaviors during menopause in women. Also, the result was similar to **Parsa et al., (2017)** they mentioned that there were significant difference in both groups regarding to all physical symptoms after program application, their changes were more meaningful in case group compared to control group, physical and sexual symptoms decrease in case group.

In accordance with **Kaur and Sidhu (2017)** who concluded that there was a significant difference between the pretest and posttest scores of menopausal symptoms in the experimental group and control group and concluded that there was significant reduction in menopausal symptoms after consumption of soya powder. In addition, **Jayabharathi & Judie (2018)** also supports the results.

This study was in agreement with **Nazari et al., (2016)** they clarified that there was effectiveness in group intervention on improving the psychological, physical and sexual field in menopausal women. Also, this result supported with **Shafaie et al., (2018)** they found that menopausal symptoms especially hot flashes reduced in support group who had education comparing with control group.

The current study results was similar with those of the study conducted by **Kavitha et al., (2017)** they found that the menopausal symptoms in the experimental group were significantly lower than that of the control group. This finding was in line with **Malik et al., (2018)** revealed that the menopausal symptoms score after the administration of modification program in the experimental

group were significantly lower than that in the control group.

This result agrees with **Forouhari et al., (2015)** who reported that life of women improved after educational intervention and education can cause an improvement in the quality of life by decreasing the problems of the menopause stage and lowering intensity of symptoms. Also, **Yazdkhasti et al., (2015)** mentioned that after training sessions in the intervention group, symptoms of vasomotor, psychological, physiological, and sexual domains were improved. **t**his result agrees with **Booth-Laforce et al., (2017)** who found that decrease menopausal symptoms especially hot flashes following the practice of yoga in intervention group in comparison with control group.

However, the current study contradicted with the findings of the study conducted by **Enjezab et al., (2015)** which was about "The effectiveness of educational intervention on health promoting on middle aged women" It revealed that there were no statistically significant difference was observed after administration of intervention in menopausal symptoms between two groups.

The current study showed that there was statistical significant difference between study and control group in depressive symptoms after program application and showed that there was reduction of the level of the severity of depressive symptoms among study group post program compared to preprogram. From the researcher point of view, these might be due to the effect of the psycho educational program session, which focus on the interests and needs of the menopausal women and trained them on stress management strategies all this increasing their positive changes in the life style of menopausal women such as regular sleep cycle, proper physical activity and proper weight and relaxation techniques.

This result confirmed with **Naworska et al., (2020)** which revealed that there was a statistically significant difference between the study and control group in depressive symptoms after social activity program. And this result supported with the study of **Sankar et al., (2020)** which was they reported that there was a statistically significant difference in depression between study and control group

Also, this study is in agreement with **Rindner et al., (2017)** illustrated that group training reduces depression in women is effective tool for exchanging experiences between individuals, promoting critical thinking and verbal skills and also supported with **Kai et al., (2016)** revealed that depressive symptoms score significantly decrease in the intervention group compared with that in the control group.

This result consistent with **Khoshbooli et al., (2021)** which was revealed that depressive symptoms were significantly reduced among participant group after sessions of program when compared to control group . Treatment groups reported a more statistically significant decrease in depression posttest than pretest. Also, this result consistent with **Hashemian et al., (2020)** who illustrated that group training improved and reduced depression in menopausal women in the intervention group compared to the controlled group and these changes were significant.

In line with **Zakaria and Akhir (2019)** studies that suggested depression will often improve following cognitive behavior therapy intervention. Also **Green et al., (2019)** revealed that participants of the treatment groups reported a more statistically significant decrease in depression from pretest to posttest and follow-up than the control group.

Kai et al., (2016) who revealed that depressive symptoms score significantly decrease in the intervention group compared with that in the control group and also **Bernard et al., (2016)** revealed that the participants group in the walking intervention showed a significant decrease in depression as compared with control group.

Also this result similar with **Lioka and Komatsu (2015)** showed that the experimental groups improve positively and improve their psychological well-being when compared with control group. In addition, **Milani et al., (2020)** reported that there after emotional intelligence training program on intervention group of menopausal women psychological wellbeing especially depressive symptoms was significantly improved in compared with control group.

The current study showed that there was statistical significant difference between study and control group in total items of marital satisfaction after program application. And showed that marital satisfaction improved among study group after program application than preprogram application. From the researcher point of view, these might be due to the effect of psycho educational program session focus on increasing women's knowledge and improved women's performance and help them to understand their own problems. Gaining effective skills that helped them to solve their marital problems, how to keep self-care, self-happiness and how to maintain intimate relationships with husbands so marital satisfaction improved in studied group than control groups.

This result confirmed with **Yarelahi et al., (2021)** they revealed that there was a statistically significant difference between the intervention and control group in marital satisfaction and was reported intervention group was significantly higher than the control group in marital satisfaction after education.

This result of current study confirm with the result perform by **Yoshany et al., (2019)** they revealed that there were a significant difference in total satisfaction scores and scales of marital communication, conflict resolution, leisure activities, marriage and children, as well as relatives and friends between postmenopausal women of the intervention group than the members of the control group whose husbands received no trainings.

These findings were in the same line with those reported by **Clements et al., (2014) and Hahlweg and Richter (2015) and Fincham et al., (2017) and also Hawkins et al., (2018)** showed that the training empowerment programs, teach couples the required skills to face the challenges of married life and prepare them to cope with marital problems efficiently. One of the very important aspects of a marital system is the amount of satisfaction that married couples experience. The result of present study similar with **Milani et al., (2020)** reported that there after emotional intelligence training program on intervention group of menopausal women marital satisfaction was significantly improved in compared with control group.

This result consistent with **Khoshbooli et al., (2021)** who showed that through their study marital satisfaction especially sexual satisfaction improved after program application among studied group. Also This result consistent with **Hashemian et al., (2020)** who studied "improving menopausal symptoms and reducing depression in postmenopausal women" found that group intervention had appositive effect on reducing marital

problems especially sexual dysfunction in menopause.

In accordance with **Vakili et al., (2019)** they concluded that there were significant difference between study and control group in total items of marital satisfaction especially sexual satisfaction and its domains and showed education programs has been effective in enhance marital satisfaction in group education. In addition, this result supported with **Abedi et al., (2017)** they determined that performing group education programs significantly increase the marital satisfaction especially all total score of sexual function and all its domains.

This result congruent with **Forouhari et al., (2015)** showed that the study group showed a significant improvement in marital especially sexual health, which their changes were significantly better than that of the control group. Also, **Osinow (2013)** who reported that after educating and informing women on menopause, an improvement of marital satisfaction and sexual activity was seen.

This result agree with **Rouhbakhsh et al., (2019)** showed that after education for intervention group was significantly higher than control group in rate score in marital satisfaction and education has a significant positive effect on marital satisfaction. Also, **Yucel and Eroglu (2013)** illustrated that after offering information and providing education about sexual life after menopause, potential sexual problems and their causes in women as well as various way to resolve and address these issues can be effective in increasing marital satisfaction. In addition **Malakouti et al., (2016)** showed that training women and educated can facilitate this process and enhance marital satisfaction.

Also, this result was in line with **Şafak Öztürk and Arkar (2017)** which revealed that, Cognitive behavior therapy was more effective in study group compared with the control group in increasing marital satisfaction among women at the menopause period. Also **Rajabi et al., (2015)** confirmed that the Cognitive behavior therapy have a positive effect in enhancing marital satisfaction in study group in comparison with control group. In addition, **Tahan et al., (2020)** reported that there is a significant difference between the marital satisfaction and sexual function before and after the test in experimental group and showed that psycho education group therapy improved and enhance marital satisfaction and sexual function.

Another study confirmed the result of current study by **Boshehri and Dashbozorgi (2018)** showed that there was a significant difference between the experimental group and the control group on marital satisfaction and sexual satisfaction. In other hand behavioral activation treatment significantly led to increase marital satisfaction and sexual satisfaction of women during menopause. In addition to, **Shobiri, et al., (2017)** showed that there was highly statistical significant difference between study and control group in total items of marital satisfaction after program application.

The current study showed that there was highly statistical significant negative correlation between total marital satisfaction and total beck depression mean score of studied menopausal women post-program application. This indicated that when depressive symptoms decrease marital satisfaction increase. From the researcher point of view, these indicate the effectiveness of the psycho-educational program sessions, in which the studied patients were taught and gained knowledge about the effective skills on how reduce their depressive symptoms through

enjoying their normal life, performing daily activities, maintaining their interpersonal relationships and maintain self-confidence and learn patience and how to cope with problems and share husband which ultimately reflect on their marital satisfaction to improved.

This agrees with **Lee (2012)** showed that there were statistically significant negative correlation between depression and marital satisfaction. Also, this result consistent with **Khoshbooli et al., (2021)** showed that cognitive behavior therapy were effective in decrease depression and enhance marital satisfaction especially sexual satisfaction among menopausal women.

This findings supported with **Şafak- Öztürk & Arkar (2017)** reported there were effectiveness of Cognitive behavior therapy on marital satisfaction and sexual functions and depression among menopausal women and, this study in line with **Green et al., (2019)** illustrated that after informing women decrease depression and enhance marital satisfaction.

The current study illustrated that there was a highly statistically significant negative correlation between total marital satisfaction and total menopausal symptoms of studied menopausal women pre and post-program application. This indicated when menopausal symptoms decrease marital satisfaction enhanced. From the researcher point of view, these might be due to the implementation of the psycho-educational program sessions, in which the studied patients were taught and gained knowledge about ways to overcome and adapt with these stage and how to follow steps to improve this stage and referral to places helped them and how to solve problems that faced than escape from and taught how to cope effectively with stress through different coping methods such as deep breathing exercise , muscle relaxation technique, positive thinking, praying , exercise, reading a book about menopause and visualization all these steps make menopausal women more quiet and encounter menopausal symptoms and enhance marital satisfaction.

This study consistent with **Nazarpour et al., (2018)** showed that there is significant negative correlation was observed between menopausal symptoms and marital satisfaction and sexual satisfaction. Also, **Lobo et al., (2014)** reported that marital satisfaction especially sexual aspect improved following improvement menopausal symptoms especially hot flashes.

The current study showed that there are highly statistically significant positive correlation between total items of menopausal symptoms and total depressive symptoms of studied menopausal women pre and post-program application. From the researcher point of view, these indicate the effectiveness of the implementation of the psycho-educational program sessions, in which the studied patients were taught and gained knowledge, about healthy diet, that suitable to their conditions, importance of practicing exercise, importance of having friends and social network to provide them with psychological support during their problems and train them on relaxation technique that help them to relax. All these things help menopausal women to relieve menopausal symptoms and improve their life and improve mood so depressive symptoms decrease.

These results were in the same line with **Ziagham et al., (2015)** which revealed that there was significant relationship between menopausal symptoms and the severity of depression and depressive symptoms improve with improve menopausal symptoms. In addition, similar with **Jelani and Ahmed (2021)** made study on

"Menopausal, depressive symptoms among women" illustrated that there are correlation between menopausal symptoms and depressive symptoms; especially there are association between urogenital problems and depressive symptoms among menopausal women.

Finally, it can be said that, the psycho-educational program in the current study has made a positive contribution in reducing depressive symptoms and enhancing marital satisfaction among menopausal women. The results of this study were consistent with the study hypothesis that Psycho educational nursing program will have positive effect on depressive symptoms and enhance marital satisfaction in study group of menopause women than before program.

Conclusion:

The study demonstrated that the psycho education program had a positive effect on depressive symptoms and marital satisfaction among studied menopausal women.

Recommendations:

1-Stress management and assertiveness training program and social skill training program should be given for all menopausal women to relieve their psychological problems and enhance their coping patterns.

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فاعلية برنامج تعليمى نفسى على أعراض الاكتئاب و الرضا الزواجي لدى النساء منقطعى الطمث

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إنقطاع الطمث يعتبر نقطة تحول فى حياة النساء وله الكثير من التغيرات فى حياتهم وخاصة التغيير فى المزاج والرضا الزواجى لذلك هدفت الدراسة إلى تقييم فاعلية البرنامج التعليمى على أعراض الإكتئاب والرضا الزواجى لدى النساء منقطعى الطمث. تم استخدام تصميم شبه تجريبى لإجراء هذه الدراسة باستخدام نهج الإختبار القبلى والبعدى لتحقيق هدف الدراسة. أجريت هذه الدراسة فى المبنى الإدارى التابع لمستشفى جامعة بنها، محافظة القليوبية . تم تطبيق هذه الدراسة على 100 من النساء منقطعى الطمث وتم تقسيمهم الى نصفين (50 للعينة الدراسة و50 للعينة التحكم) بالقسم الادارى لمستشفى بنها الجامعى. تم استخدام أربع أدوات لجمع البيانات لتحقيق هدف الدراسة . أظهرت النتائج أن البرنامج التعليمى أثبت فعاليته بشكل كبير فى تقليل أعراض الإكتئاب وتعزيز الرضا الزواجى، مما يدعم فرضيات الدراسة. كما أوصت الدراسة توفير عمل برنامج تدريبي لإدارة الإجهاد(التوتر) والتوكيد وبرنامج تدريبي على المهارات الاجتماعية لجميع النساء منقطعى الطمث لتخفيف مشاكلهن النفسية وتعزيز أنماط التكيف لديهم.