Association between Menopausal Symptoms, Quality Of Life and Marital Adaptation among Working Women

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Abstract: Back ground: Menopause is a significant landmark for all women. It is a universal event that occurs within a long process of climacteric changes. Quality of life is a multidimensional health concept which represents mainly subjective symptoms that may influence the sense of well being and day- to- day function. Women may experience significant quality of life and marital relation changes during menopause, only few researches have quantified these changes

Aim of the study: To assess association between menopausal symptoms, quality of life and marital adaptation among working women. A descriptive correlational research design was carried out in the present study started by the beginning of July 2018 and continued until the end of September 2018.

Setting: The study was conducted in all departments of Damanhour University directory.

Subjects: A convenient sample of 200 female at the menopausal age in the previously mentioned settings was selected. Tool: Data was collected through four tools, A Structured interview schedule, Greene Climacteric Scale, dyadic adjustment scale and quality of life scale.

Results: the study results revealed that more than one third (39%) of the study subjects aged from 45 to less than 50 yrs, less than half (49.5%) had university education, more than two thirds (68.5%) were originally urban dwellers, more than three quarters (77.5%) reported that the menopausal symptoms were quite a bit bothering, and most commonly acknowledge symptoms were psychological symptoms then somatic and lastly vasomotor and sexual symptoms. Regarding quality of life, more than one half (52%) scored their feeling as mostly satisfied, less than three quarters (74%) had moderate marital adaptation, the total score of severity of menopausal symptoms was negatively correlated with total score of marital adaptation and quality of life (r=-.085 & r=--.104) respectively, while total score of quality of life was positively correlated with marital adaptation (r=.282). Conclusion: Menopause is negatively affecting the quality of life and marital relation. Recommendations: health education programs for early prevention should be offered for menopause women through mass media; and each hospital establish special clinics for menopausal care, information and follow up for menopausal women.

Keywords: QOL (quality of life), MRS (menopausal rating scale), DAS (dyadic adjustment scale).

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I. Introduction

Menopause is a physiological event and a time of great transition, physically and emotionally in any women's life. Menopause is defined as the permanent cessation of menses. The age at which natural menopause occurs is between the ages of 45 and 55 years for women worldwide ⁽¹⁾. Natural menopause is recognized after 12 months of amenorrhea that is not associated with a pathologic cause ^(2, 3). The grouping was done according to the World Health Organization (WHO) classification, premenopausal women; were defined as women who had experienced regular menstrual bleeding within the last 12 months, perimenopausal women who had experienced irregular menses within the last 12 months or the absence of menstrual bleeding for more than 3 months but less than 12 months, and postmenopausal women; who have not experienced menstrual bleeding for 12 months or more ⁽⁴⁾.

The cessation of women's fertility contributes to diffusion of their sexuality identity in relation to the concept of femininity, sexuality and body image. It may threaten their ability to remain adequate wife and mother in spite of loss of reproductive ability. Each women reacts somewhat differently to the changes in menopausal endocrine function. These reactions are unpredictable and depend to some extent on women's menopausal symptoms which are affecting all dimensions of health. During this period women can experience many symptoms including hot flashes, night sweats, sleep and mood disorders, impaired memory, lack of concentration, nervousness, depression, insomnia, bone and joint complaints, and reduction of muscle mass. The duration, severity, and impact of these symptoms vary extremely from person to person, and population to

population. Some women have severe symptoms that greatly affect their personal and social functioning, and quality of life ^{(5).}

World Health Organization defines Quality of life (QOL) as an individual's perception of their position in life in the context of culture and values system in which they live and in relation to their goal expectations, standards and concerns ⁽⁶⁾. Quality of life is an important outcome measure of health care, and understanding the impact of menopause on quality of life is a critically important part of the care of symptomatic postmenopausal women ^(7, 8).

Menopause is an important life event that may have a negative influence on quality of life. Work ability, a concept widely used in occupational health, can predict both future impairment and duration of sickness absence ⁽⁹⁾ .Work participation plays an important role in quality of life because it gives a sense of usefulness and satisfaction. The relationship between menopausal symptoms and work participation has not been reported in enough studies ⁽¹⁰⁾. Hormonal changes in the period of menopause, namely a decrease in estrogen, have serious effects on women's lives. It is also a commonly held belief that this period has negative effects on women's spiritual health and causes depression because of the meanings attributed to women in this period. Psychological complaints in this period create negative feelings in women and can negatively affect relationship in a marriage and urogenital changes can harm the quality of the women's sexual lives ⁽¹¹⁾. This raises the question of whether the presence of menopausal symptoms, besides affecting quality of life, could be a determinant of poor work ability ^(12, 13).

Postmenopausal women have been neglected by the medical community. Today with prolonged life expectancy women may spend as much as one third of their lives in menopause. There is an increasing need for better quality of live and in particular psychological well being⁽¹⁴⁾. The maternity health nurses focuses on helping women to understand the physical changes that occur and the psychological responses to cope with symptoms of menopause. Nurses are often the primary sources of information about menopause, its symptoms, medical and alternative therapies are foremost in arsenal of intervention available to nurses in this area. Moreover, the maternity nurse plays as well as positive practices and behaviors related to the reproductive health for each woman, encourage women to determine their health goals and behaviors, teach about health and illness, offer interventional strategies, alternative measures that mitigate symptoms and helping women to anticipate and deal positively with psychological and physical changes ^(15, 16).

Significance of the study

Menopause is a normal degenerative transition associated with aging and loss of fertility. It can profoundly alarm the quality of life and marital adaptation. More than 80% of women report physical and psychological symptoms that commonly accompany menopause, with varying degrees of severity and life disruption. It is necessary to understand the process of menopause and women's health. Few empirical studies, however, have examined association between menopausal symptoms, quality of life and marital relationship among working women. Maintaining good physical functioning with age is a vital component of independence in later life. Health-care providers play a more visible and instrumental role in continuously assessing menopausal women's needs as well as to implement appropriate health educational programs and to develop a new way to meet their demands ⁽¹²⁾.

Aim of the study

To assess the association between menopausal symptoms, quality of life and marital adaptation among working women.

Research hypotheses:

- Menopausal women have a relationship between their menopausal symptoms, quality of life and marital adaptation.
- Menopausal women have not a relationship between their menopausal symptoms, quality of life and marital adaptation.

II. Materials and Method

Design

A descriptive correlational research design was utilized to conduct the current study.

Settings

Data was collected from all departments of Damanhour University directory namely: the account department, the secretarial department, the student affairs department, the legal affairs department, the pension affairs department, the statistics department and the archive department. **Subjects**

A convenient sample of 200 female at the menopausal age in the previously mentioned settings was selected. The sample size was estimated based on the Epi-Info 7 program using the following parameters:

- (1) Target population 400;
- (2) Expected frequency p = 50%;
- (3) Acceptable error = 5%;
- (4) Confidence coefficient = 95%;
- (5) Sample size = 200.

Criteria

Inclusion

- All the women who had attained menopause.
- Age 45 years or more.
- Who have symptoms of menopause
- Women who have menstruation stopped at least from 6-12 months.
- Married and have living husband.
- Willing to participate in the study.

Tools: Four tools were used to collect research data. These tools are:

Tool one: A Structured interview schedule was developed and used by the researcher to collect the necessary data about the study subjects. It entailed three parts:

Part I:

Basic socio-demographic data: It was designed to collect data about socio-demographic characteristics of the study subjects and their husbands such as age, level of education, occupation, family income, crowding index, family type, residence, husband level of education and occupation.

Part II: *Medical history*: It involves: such as cardiovascular disease, diabetes mellitus disease, thyroid gland disease, osteoporosis, hypertension disease, psychiatric disease, and pulmonary disease.

Part III: Reproductive history: It comprises:

Gravidity and parity history such as number of gravida, number of parity, number of abortion and number of living children.

Menstrual history included age at menarche, amount, duration, rhythm, and interval of menstruation, age at menopause and causes of menopause natural cause or induced.

Tool two: Greene Climacteric Scale developed by Greene J (1990) It was developed to measure the severity of menopausal symptoms and translated by Ebrahim S (2006). It comprises 21 statements with 4 points likert scale. Statement are divided into four main groups; *psychological symptoms, somatic symptoms, vasomotor symptoms*, and additional item related to *sexual function*.

- *Psychological symptoms* (N=11 Statement), are further sub-divided to measurement of *anxiety* (items 1,2,3,4,5 and 6) and measurement of *depression*(items 7,8,9,10 and 11)

- Somatic symptoms (items12, 13, 14, 15, 16, 17 and 18).

- Vasomotor symptoms (items 19, 20), and an additional item related to sexual function (items 21). The subject's response to each statement varies between: not bothering (0), bothering a little (1), quite a bit bothering (2), and extremely bothering (3). Each subject was instructed to choose one of the four possible responses that are the closest to how she feels with the statement . The response categories were scored 0, 1, 2, and 3 according to the woman's degree of the symptom she feels . The total score varies between 0 to 63, which was computed by summing the responses of all scale items. Scoring of severity of menopausal symptom sub-items and total score were computed and ranked into:
- Bothering a little 0 < 21.
- Quite a bit bothering 21 < 42.
- *Extremely bothering* $42 \le 63$.

Tool three: Dyadic Adjustment Scale (DAS)

The DAS was originally developed by Spanier (33) in 1976 in order to measure the quality of a marriage, marital adaptation, and the quality of the marital adaptation. The scale measures 4 dimensions of the relationship between married couples. These 4 dimensions constitute the subscales of the scale: **1. Dyadic consensus:** This section comprises 13questions (items 1–3, 5, and 7–15) regarding the level of agreement between married couples on important subjects and consensus between married couples. The maximum score obtainable from this section is 65. **2. Dyadic satisfaction:** This section comprises 10 questions (items 16–23, 31, and 32) regarding the positive and adverse characteristics related to emotions and communication. The

maximum score obtainable from this section is 50. **3.** Affective expression: This section comprises 4 questions (items 4, 6, 29, and 30) regarding affectionate behavior and agreement on the form of affection displayed. The maximum score obtainable from this section is 12. **4.** Dyadic cohesion: This section comprises 5 questions (items 24–28) regarding the time couples spend together. The maximum score obtainable from this section is 24 (³⁴⁾. The scale has a total of 32 questions, with items scored according to the level of agreement with statements, and the scale is rated using the total overall score. The score of the DAS ranges between 0 (minimum) and 151 (maximum), with higher scores indicating a high level of marital adaptation. The score ranged from 0-151 minimum marital adjustment (0-50), moderate marital adjustment (51-100) and maximum marital adjustment (101-151) after consulting statistician. The Cronbach coefficient alpha computed for the entire DAS was 0.86. Cronbach coefficient alphas computed for DAS subscales were as follows: dyadic consensus: 0.88, dyadic satisfaction: 0.67, affective expression: 0.81, dyadic cohesion: 0.52.

Tool four: - The quality of life scale originally developed by Flanagan in 1978-1982. This scale has been found to have a good reliability and validity Burkhardt CS et al 2003. The scale composed of 16 items designed to measure six domains: (a) physical and marital wellbeing, (b) relations with others, (c) social, community, and civic activities, (d) personal development and fulfillment, (e) recreation, and (f) independence. Each subject was instructed to choose one of the five possible responses that are closest to how she felt with the statement (dissatisfied, mostly dissatisfied, mixed (neutral), mostly satisfied and satisfied). The responses categories scored 1, 2, 3, 4, and 5 according to the satisfaction. The total score was calculated by adding together the score of each item. The score ranged from 16 to 80. High score indicated better quality of life, satisfied (65-80), mostly satisfied (49- 64), mixed (neutral) (33-48), mostly dissatisfied (17-32) and dissatisfied (16).

Content validity:

Tools one, two, three and four were tested for content validity by a jury of five experts in the related field (the obstetrics department). Tool two reliability was tested by Cronbach's Alpha coefficient test. Its result was (α = 0.870) for Greene scale which indicates an accepted reliability of these tool.

Pilot study:

A pilot study was carried out on 15 women from the previously mentioned setting. Their oral consent to participate in the study was first obtained. Each woman was interviewed individually and these women were excluded from the actual study sample.

The purposes of the pilot study were to:

- Ascertain the relevance and applicability of the study tools.
- Detect any problem peculiar to the statements such as phrasing, sequence and clarity.
- Estimate the time needed to complete the tools.

The pilot study revealed that:

- The average time needed to complete the interview schedule ranged between 15-20 minutes, depending upon each woman's level of understanding and response to the interview.
- Following this pilot study, the tools were reconstructed, modified and put in the final form and to be ready to collect the necessary data about the study subjects.

Ethical consideration:

For each recruited subject the following issues were considered: securing the subject's informed written consent, confidentiality and privacy of her data were assured.

Field of Work:

The study was executed according to the following steps: An official letter clarifying the purpose of the study was forwarded to the responsible authorities of the study setting (Damanhour university directory) to obtain their permission to conduct the study and collect the necessary data. The researcher visited Damanhour university directory department 3 days/week. Data was collected through the interviewing technique where each subject was individually interviewed during her working time in total privacy. Data collection started by the beginning of July 2018 and continued until the end of September 2018. The researcher explained the purpose of the study to each woman, and each subject's oral consent to participate in the study was obtained from them. Subjects were assured that the obtained information will be confidential and will be used only for the purpose of the research.

Statistical analysis

Data was fed, coded, edited and analyzed using PC with statistical packages for science (SPSS) version 20 for windows. The following statistical measures were used: Frequency & percentage used for describing and summarizing categorical data. Cross tabulation was used with percentage to explore relationships between variables the 0.05 level was used as the cut off value (P value) for statistical significance.

Limitations of the study: - - Some of the women refused to participate in this study because they had many duties.

Socio demographic characteristics	No (n=200)	%	
Age			
45 to less than 50	78	39.0	
50 to less than 55	64	32.0	
More than 55	58	29.0	
Education			
Illiterate or read and write	16	8.0	
Primary	29	14.5	
Secondary	48	24.0	
University	99	49.5	
More than university	8	4.0	
Residence			
Rural	63	31.5	
Urban	137	68.5	
Occupation			
Administration work	131	65.5	
Cleaning work	60	30.0	
Other	9	4.5	
Family income			
Enough and exceed	48	24.0	
Enough	83	41.5	
Can enough	49	24.5	
Not enough	20	10.0	
crowding			
More than 2/room	138	69.0	
Less than 2/ room	62	31.0	
Husband occupation			
Professional	64	32.0	
Employee	66	33.0	
Worker	48	24.0	
Trader	22	11.0	
Husband education			
Illiterate or read and write	9	4.5	
Primary	25	12.5	
Secondary	40	20.0	
University	119	59.5	
More than university	7	3.5	
Type family			
Extended	94	47.0	
Nuclear	106	53.0	
Family number			
Two	11	5.5	
Three	35	17.5	
Four	50	25.0	
Five and more	104	52.0	

Table I Shows number and percent distribution of the study subjects according to their sociodemographic characteristics. As regards age, it can be observed more than one third (39%) aged from 45 to less than 50 yrs ,while 29% were aged more than 55 yrs. Regarding education it was cleared that less than one half (49.5%) of the study subjects had university education compared to only 8% were illiterate or just able to read and write. In relation to **residence**, the table also reveals that more than two thirds (68.5%) were originally urban dwellers compared to 31.5% were originally rural dwellers. As regards occupation, it was founded that more than two thirds (65.5%) had administrative work. On the other hand more than two fifths (41.5%) had enough income. As for the crowding index the table shows that more than two thirds (69%) live more than 2 person / room. It was also found that 33% of husbands of the study subjects were employee and more than one half (59.5%) of the study subject had university education. In relation to family type it was also found that 53% live within nuclear family.

Obstetric history	No (n=200)	%		
Gravidity				
Non	10	5.0		
One	39	19.5		
Two	46	23.0		
3 and more	105	52.5		
Parity				
Nullipara	10	5.0		
Primipara	41	20.5		
Multipara	149	74.5		
Abortion				
Non	113	56.5		
One	52	26.0		
Two	23	11.5		
3 and more	12	6.0		
No of living children				
Non	10	5.0		
One	41	20.5		
Two	52	26.0		
3 and more	97	48.5		

Table II: Distribution of the study subjects according to their obstetric history.

Table II Illustrates the obstetric history of the study subjects. It was observed that more than one half (52.5%) of the study subjects were pregnant for three times or more, while only 5% of them were nulligravida. Regarding parity, it was founded that 74.5% of the study subjects were multipara and 5% were nullipara. When abortion was considered, it was cleared that more than one half had no abortion and 6% had abortion three times or more. In relation to number of living children, it was observed that less than one half had three or more living children and only 5% had no living children.

Table III: Distributi	on of the study subject	ts according to their me	nstrual history.
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Menstrual history	No (n=200)	%
Age of menstruation		
Less than 12yrs	59	29.5
12 to 16 yrs	86	43.0
More than 16yrs	55	27.5
Menstrual regularity		
Regular	118	59.0
Irregular	82	41.0
Amount		
Scanty	40	20.0
Moderate	91	45.5
Excessive	69	34.5

Menstrual history	N. (~ 200)	٩/
Duration	- No (n=200)	%
1- 4 days 5 to 7 days	57	28.5 41.0
More than 7 days	82 61	30.5
Interval		
Less than 22 days From 22 to 35 days More than 35 days	55 101 44	27.5 50.5 22.0
Age of menopause		
35 to less than 40 yrs 40 to less than 45 yrs 45 to more than 50 yrs	45 45 110	22.5 22.5 55.0
Type of menopause		
Natural Artificial	161 39	80.5 19.5
Cause of artificial menopause		
Hysterectomy or overectomy Radiation or chemotherapy	16 23	8.0 11.5
Total	200	100%

Table III clarifies the distribution of the study subjects according to their menstrual history. It was observed that more than two fifth of the study subject had age of menarche from 12 to 16 yrs old, compared to 27.5% got their menarche more than 16 yrs old. Considering rhythm of menstruation, more than one half (59%) of the study subject had regular menstruation, while more than two fifth (41%) had irregular menstruation. Concerning amount of menstrual flow, it was observed that more than two fifths (45.5%) had moderate amount and 34.5% had excessive amount. When duration of cycle was considered, it was observed that 41% and 30.5% of the study subject had their cycle 5 to 7 days and more than 7 days respectively. Regarding interval of menstruation, it was founded that more than one half (50.5%) of them had their menstrual interval from 22 to 35 days, while 22% had their menstrual interval more than 35 days. In relation to age of menopause, the table shows that more than one half (55%) of the study subject had their menstruation ceased at the age from 45 to more than 50 yrs and the majority (80.5%) of them had natural menopause compared to only 19.5% had artificial menopause.

Diseases*	No (n=200)	%
None	112	56.0
Hypertension	28	14.0
Heart disease	4	2.0
Diabetes	25	12.5
Chest disease	11	5.5
Vaginal inflammation	9	4.5
Depression	8	4.0
Others	3	1.5

*More than one response

Table IV clarifies the distribution of the study subjects according to their menstrual history. It was founded that more than one half of the study subjects had no medical history compared to only 14% and 12.5% of them had hypertension and diabetes mellitus respectively.

severity of menopausal symptoms	Mean ± SD
Vasomotor	2.55 ± 1.53
Psychosocial	3.19 ± 1.99
Somatic	2.94 ± 1.45
Sexual	2.28 ± 0.749

Table V elucidates the mean and standard deviation of severity of menopausal symptoms according to Greene scale. It was observed that the mean and standard deviation of vasomotor, somatic, sexual, and psychological symptoms were 2.55 ± 1.53 , 2.94 ± 1.45 , 2.28 ± 0.749 and 3.19 ± 1.99 respectively.



Figure (1) Distribution of the study subjects according to their severity of menopausal symptoms.

The figure revealed that more than three- quarters (77.5%) of the study subjects reported that menopausal symptoms were quite a bit bothering, compared to less than one fifth of them who reported that they were extremely bothering and only 5% of them reported that menopausal symptoms were bothering a little.



Figure (2) Distribution of the study subjects according to their responses toward their quality of life

Figure (2) presents the distribution of the study subjects according to their responses toward their quality of life. It shows that more than one half of the study subjects (52%) scored their feeling as mostly satisfied, and more than one third (34%) were satisfied, compared to only 10.5%, 3% and 1% were neutral, mostly dissatisfied and dissatisfied respectively.

Dyadic adjustment subscale	
	Mean ± SD
Dyadic consensus	50.6 ±7.84
Dyadic satisfaction	35.69 ±7.42
Affective expression	8.35 ± 2.16
Dyadic cohesion	10.53 ± 4.73
Total	105.93 ± 16.60

Table VI: Mean and Standard deviation of Dyadic adjustment subscale

Table VI presents the Mean and Standard deviation of Dyadic adjustment subscale. It was observed that the mean and standard deviation of Dyadic consensus, Dyadic satisfaction, Affective expression and Dyadic cohesion were 50.6 \pm 7.84, 35.69 \pm 7.42, 8.35 \pm 2.16 and 10.53 \pm 4.73 respectively. On the other hand the total mean and standard deviation of Dyadic adjustment scale were 105.93 \pm 16.60.



Figure (3) Distribution of the study subjects according to their responses toward their marital adaptation

Figure (3) illustrates the distribution of the study subjects according to their responses toward their marital adaptation. It was presented that the most (74%) of the study subjects had moderate marital adaptation compared to more than one quarter (26%) had maximum marital adaptation with completely absent of minimum marital adaptation.

	Severity of menopausal symptoms								X2
Quality of life	Mild		Moderate		Severe		Total		Р
	No	%	No	%	No	%	No	%	
Dissatisfied	0	0%	0	0%	3	100%	3	1.5%	12.31
Mostly dissatisfied	0	0%	5	83.3%	1	16.7%	6	3%	.013*
Mixed (neutral)	0	0%	18	85.7%	3	14.3%	21	10.5%	
Mostly satisfied	5	4.9%	81	79.4%	16	15.7%	102	51%	
Satisfied	5	7.4%	51	75%	12	17.6%	68	34%	
Total	10	5%	155	77.5%	35	17.5%	200	100%	

Table VII: Relationship between quality of life and severity of menopausal symptoms.

X2 chi square test *significant at $P \leq 0.05$

Table VII presents the relationship between quality of life and severity of menopausal symptoms. It was showed that there was a significant relationship between quality of life and severity of menopausal symptoms. More than one half (51%) of the study subject had mostly satisfied quality of life 79.4% of them had moderate menopausal symptoms compared to only 15.7% and 4.9% had sever and mild menopausal symptoms respectively. Regarding mixed (neutral) the majority (85.7%) of them had moderate menopausal symptoms with completely absent of mild menopausal symptoms. In relation to satisfied quality of life, three quarters (75%) of them had moderate menopausal symptoms compared to 17.5% and 7.4% had sever and mild menopausal symptoms respectively.

Severity of	Marital adaptation						X^2
menopausal symptoms	Moderate marital adaptation		Maximum marital adaptation		Total		Р
	No	%	No	%	No	%	
Mild	10	100%	0	0%	10	5%	
Moderate	107	69.1%	48	30.9%	155	77.5%	11.142 .004*
Severe	32	91.4%	3	8.6%	35	17.5	.004
Total	149	74.5%	51	25.5%	200	100%	

 Table VIII: Relationship between severity of menopausal symptoms and marital adaptation.

X2 chi square test *significant at $P \leq 0.05$

Table VIII indicates the relationship between severity of menopausal symptoms and marital adaptation. It was observed that more than three quarters (77.5%) had moderate menopausal symptoms, more than two thirds (69.1%) of them had moderate marital adaptation and less than one third (30.9%) had maximum marital adaptation. Regarding severe menopausal symptoms, it was observed that the majority (91.4%) of them had moderate marital adaptation compared to only 8.6% of them had maximum marital adaptation. Concerning mild menopausal symptoms, it was presented that all (100%) of them had moderate marital adaptation with completely absent of maximum marital adaptation. Statistically, there was a significant difference between severity of menopausal symptoms and marital adaptation.

Table 13. Relationship between quanty of the and marital adaptation.							
	Marital adaptation						**2
Quality of life	Moderate marital adaptation		Maximum marital adaptation		Total		X ² P
	No	%	No	%	No	%	
Dissatisfied	3	100%	0	0%	3	1.5%	
Mostly dissatisfied	6	100%	0	0%	6	3%	17.299 ^a
Mixed(neutral)	21	100%	0	0%	21	10.5%	.000*
Mostly satisfied	78	76.5%	24	23.5%	102	51%	
Satisfied	42	61.8%	26	38.2%	68	34%	
Total	149	74.5%	51	25.5%	200	100%	

Table IX: Relationship between quality of life and marital adaptation.

X2 chi square test *significant at $P \leq 0.05$

According to table (IX) More than one half (51%) of the study subject had mostly satisfied quality of life 76.5% of them had moderate marital adaptation compared to 23.5% had maximum marital adaptation. Regarding mixed (neutral), mostly dissatisfied and dissatisfied, the all (100%) of them had moderate marital adaptation with completely absent of maximum marital adaptation. In relation to satisfied quality of life, less than two thirds (61.8%) of them of them had moderate marital adaptation compared to 38.2% had maximum marital adaptation. Statistically, there was a significant difference between quality of life and marital adaptation.

	Severity of menopausal symptoms	Marital adaptation	Quality of life	
Score	r(p)	r(p)	r(p)	
Severity of menopausal symptoms	1	085	104	
		.234	.144	
Marital adaptation	085-	1	.282	
	.234		(.000)*	
Quality of life	104-	.282	1	
	.144	(.000)*		

r (P) Pearson correlation test & P for r test

*: Significant at P 0.01

Table (X) presents the correlation between severity of menopausal symptoms, marital adaptation and quality of life. It was found that total score of severity of menopausal symptoms was negatively correlated with total score of marital adaptation and quality of life(r=-.085 & r=-.104) respectively, while total score of quality of life was positively correlated with marital adaptation (r=.282).

IV. Discussion

Menopause is a reproductive milestone in the women's life. It is caused by aging of ovaries which leads to decrease in production of ovarian estrogen and progesterone. The deficiency of these hormones elicits various somatic, vasomotor, sexual and psychological symptoms that impair the overall quality of life of women $\binom{17, 18}{2}$.

Quality of life is multidimensional health concept which represents mainly subjective symptoms that may influence the sense of wellbeing and day-to-day function. It includes several important domains such as, perceived wellbeing, role disability, physical, psychological, and social function. Women may experience significant quality of life changes and negative effects on relationships with their husbands ⁽¹⁹⁾.

The current study results pointed out that more than one third of the study subjects aged from 45 to less than 50 yrs, which is considered as mean age of menopause among Egyptian women and which falls around this figure indicated by the study was conducted (1995) by El Ibiary who concluded that the mean age of menopause was $45.5 + 2.2^{(20)}$. On the other hand these results are not in line with Mahrouse A (2012), who concluded that the most of the study subject were aged from 50 to less than 55 years old ⁽²¹⁾.

The finding of the current study revealed that the majority of the study subjects had quite a bit bothering followed by extremely bothering and then bothering a little. The same results were reported by Gehad M (2010), who suggested that the majority 95% of menopausal women in both countries suffered from menopausal symptoms with variation of intensity, more than half of women suffered from moderate symptoms ^{(22),} and partially agree with Mahrouse A (2012), who reported that the majority of the study subjects had severe menopausal symptoms followed by moderate and then mild symptoms ^{(21).}

On the other hand the current results did not agree with Gahanfar Sh et al (2006) and with Chedraui P (2007), who found that the mean scores of menopause rating scale were high in all domains. The result variations could be attributed to that the menopausal symptoms are influenced by socio-demographic/ socio-culture factors, economical stressors, general health status, and individual perception of menopause $^{(23, 24)}$.

On discussing the menopausal symptoms at different subscale the current study found that the most commonly acknowledge symptoms were psychological symptoms then somatic and lastly vasomotor and sexual symptoms. This could be due to stressors such as, lowest socioeconomic level and decreased income, another aspect is the fact the sexual symptoms had low score. The possible explanation for this may be that the postmenopausal women are less active sexually in our society, they become involved in taking care of their grand children and in performing religious activities like prayers and other rituals, and also the stigmatization of discussing these subjects.

The current result was partially agree with two studies, *firstly*, Dhillon HK et al (2006), who assessed the severity of the menopausal symptoms by MRS it can be observed that the highest mean score of menopausal symptoms were in domains urinary bladder problems and worry $(3.82\pm0.57 \& 3.80\pm0.57 \text{ respectively})$ followed by physical and mental stress 3.78 ± 0.57 compared to urogenital symptoms as dryness of vagina 2.82 ± 0.42 which was the lowest mean score ⁽²⁵⁾.

Secondly, Gharaibeh et al (2011), who found that the most commonly acknowledged symptom was somatic symptoms followed by psychological symptoms ⁽²⁶⁾. On the other hand the current results did not agree with disagree with Elsayed E& shokry E et al (2012), who mentioned that, the highest mean scores of menopausal symptoms were somatic symptoms and urogenital domains in postmenopausal women (10.46±6.28, 9.96 ± 5.26 respectively). While the mean scores of Psychological symptoms is lower in postmenopausal women (3.38±4.22) in their study about Menopausal symptoms and the quality of life among pre/post-menopausal women from rural area in Zagazig city⁽²⁷⁾.

Also the contrary with the present study results, Yakout S, et al (2011), who mentioned that, the highest mean score of menopausal symptoms were in different domains urinary tract, muscles and skeletal (12.3 ± 3.1 , 10.4 ± 2.7 , respectively) compared to cardiovascular (3.4 ± 1.2) which are the lowest, in their study about menopausal symptoms and quality of life among Saudi women in Riyadh and Taif⁽²⁸⁾.

Regarding the quality of life , the current study found that more than one half of the study subjects were mostly satisfied followed by satisfied , neutral, mostly dissatisfied, and then dissatisfied. This is partially in line with Mahrouse A (2012), who summarized that the most commonly acknowledge quality of life scores was neutral feeling followed by mostly satisfied , satisfied, the mostly dissatisfied, and then no scoring as dissatisfied ⁽²¹⁾. The possible cause is that one of the most basic, and recalcitrant, issue in assessing quality of life is whether it should be regard as subjective, based on the woman's own judgments and feelings and Arabs are religious people and they accept every change as they believe that everything is coming from god.

The finding of the current study revealed that there was statistically significant difference between menopausal symptoms and quality of life; this could be because during menopause, women often experience some symptoms which may affect their daily activities. This may be explained by the fact that well being in general is related to self rated health status, symptoms, stresses, and attitude toward aging and menopause.

These findings are in congruent with the results of Karacama (2007) who found a significant relation between total menopausal symptom scores and quality of life scores ⁽²⁹⁾. These also agree with Yakout S (2011), who concluded that Saudi menopausal women in the study subjects experience high prevalence of menopausal symptoms that adversely affected their quality of life ⁽²⁸⁾. Moreover, the current study results are in line with J.E.Blume et al (2002), who mentioned that menopause causes a decrease in quality of life ⁽³⁰⁾. Also agree that with Elsayed E & shokry E,etal (2012), Who mentioned that many women feel that quality of life is severely compromised by the presence of menopausal symptoms in her study about measuring the impact of menopausal symptoms on quality of life ⁽²⁷⁾. Also agree with Jennifer W & Marco D et al (2013), who mentioned that (46.7)% of women experiencing at least one of the listed symptoms as anxiety ,depression, hot flushes ,difficult sleeping &vaginal dryness in their study about the impact of menopausal symptoms on quality of life ,productivity &economic out comes⁽³¹⁾. The same results were reported by Chedraui et al (2007), Hauser et al (1994), Blumel (2000) and Williams RE et al (2009) ^(24,32,30&33). On the other hand some studies have no significant changes in QOL in menopausal women, Ekstrom (200), Cheng (2007) ^(34&35).

Concerning the relationship between severity of menopausal symptoms and marital adaptation, the present study reported a significant difference between severity of menopausal symptoms and marital adaptation. These findings are supported by Arslan H et al (2004), who found that there was a statistically significant inverse relationship between the scores of subscales and the overall scores of the MSRS and the DAS (r: -0.357, P < 0.001) ⁽³⁶⁾. Also the current results are congruent with the results of Yurdakul M et al (2007), who reported that there is an inverse relationship between the marital adaptation and menopausal symptoms of women experiencing a climacteric period, and that those with a high level of marital adaptation suffer less from menopausal complaints ⁽³⁷⁾. It is no surprise that marital adaptation deteriorates in tandem with the increase in menopausal symptoms, because problems experienced during menopause impair the quality of life of women and also negatively affect marital relationships.

The present study revealed that a highly significant difference relationship between quality of life and marital adaptation and the total score of severity of menopausal symptoms was negatively correlated with total score of marital adaptation and quality of life, while total score of quality of life was positively correlated with marital adaptation. The current finding is similar to the study conducted by Ehsanpour S et al (2007), who reported that there was a significant difference between marital status and quality of life in psychological dimension (p=0.03) and sexual dimension (p=0.000) ⁽³⁸⁾. Also the current study results is in agreement with The results of Dennerstein L et al (2002), who conducted study in Australia and showed that social and biological health of the menopausal women is mainly affected by factors such as marital status, daily errands, and life events^{(39).}

V. Conclusion

The current study concluded that the most reported symptoms were psychological symptoms then somatic and lastly vasomotor and sexual symptoms. The total score of severity of menopausal symptoms was negatively correlated with total score of marital adaptation and quality of life, while total score of quality of life was positively correlated with marital adaptation.

VI. Recommendation

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

- E Health education programs for early prevention should be offered for menopause women through mass media, especially television.
- It is recommended that each hospital establish special clinics for menopausal care, information and follow up for menopausal women.
- Continuing educational program should be developed by simple booklet to teach and train nurses about the menopausal changes, information about the available services and facilities as well as some positive life style activities.
- E Further studied are needed to identify the different traditional methods used to overcome menopausal symptoms in Egypt.

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