



Menopausal Symptoms and Marital Adaptation among Working Women

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Abstract

Background: Menopause is the time in women's lives when menstrual periods stop permanently, they had no menstrual bleeding for a year, and they are no longer able to bear children as a result of decrease in hormone production by the ovaries. **Aim of the study:** was to assess menopausal symptoms and marital adaptation among working women. **Study design:** Descriptive cross sectional design was used. **Setting:** The present study was conducted among menopausal working women in Zagazig University. **Study subjects:** A purposive sample consisted of 160 menopausal working women. **Tools of data collection:** Three tools were used; interview questionnaire including demographic data and medical history, the menopause rating scale and dyadic adjustment scale. **Results:** more than half of menopausal women had severe total symptoms and three quarters of them had maximum level of marital adaptation. **Conclusion:** there was no statistically significant relation were found between symptoms severity and marital adaptation among menopausal working women. **Recommendation:** Health education program for menopausal women to increase awareness about symptoms of menopause and how to adapt with this period and further studies are needed to assure study results.

Keywords: Marital adaptation, menopausal symptoms, working women

Introduction

Menopause is defined as the permanent cessation of menstruation resulting from the loss of ovarian follicular activity, and it marks the end of a woman's reproductive capacity. It is a retrospective diagnosis usually made after 12 months of amenorrhea, and may be genetically determined. Symptoms often begin in the perimenopausal years. In the UK, the mean age for the menopause is 50 years and 9 months (Fraser et al., 2020).

The process of menopause is gradual and happens in three stages: **Peri menopause**, which can begin eight to 10 years before menopause when ovaries

gradually produce less estrogen. At this stage, many women may experience menopause symptoms but still having menstrual cycles during this time and can get pregnant. **Menopause:** Is the point when women no longer have menstrual periods for 12 consecutive months. **Post menopause:** This is the name given to the rest of life after menopause, during this stage, some women continue to experience menopausal symptoms for a decade or longer after the menopause transition. As a result of a lower estrogen level, women in the postmenopausal phase are at an increased risk for several health conditions,

such as osteoporosis and heart disease (**Holloway, 2021**).

Menopausal symptoms include hot flashes, also known as vasomotor symptoms (sudden feeling of warmth that spreads over body). Night sweats and/or cold flashes and vaginal dryness that causes discomfort during sex. Urinary urgency (pressing need to pee more frequently), difficulty sleeping (insomnia), emotional changes (irritability, mood swings or mild depression), dry skin, dry eyes or dry mouth and breast tenderness. Some people might also experience racing heart, headaches, Joint and muscle aches and pains, changes in libido (sex drive), difficulty concentrating or memory lapses (often temporary), weight gain and hair loss or thinning (**Moustafa et al., 2020**).

Marital adaptation defined as the mental state among couples in which there is an overall feeling of happiness and satisfaction with their marriage. All the marriages are aimed at happiness in one or another way. Most couples become married filled up with expectations. Some of the expectations will be realistic while others are unrealistic. This is due to the complex nature of marriage and each individual is as complex as a universe (**Baquedano et al., 2020**).

The severity of menopause symptoms (e.g., hot flashes, night sweats, sleep disturbance, mood issues, vaginal dryness, sexual pain), may also impact a woman's partner and her relationship with her partner. Therefore, addressing menopause symptoms may provide benefits beyond personal symptom relief. Addressing these symptoms brings a greater understanding of their effects, which leads to better management of the symptoms (**Park, 2020**).

Significance of the study

Women's health at the age of menopause is very important (**Im et al., 2015**). Menopausal symptoms affect women's physical, mental and sexual health and affect work, social activities,

mood, communication with others, life pleasure, and the quality of their life (**Shirvani, 2016**). There may be a developmental crisis in women's life, the physiological changes of this period may have effect on her personal feelings and satisfaction with her life (**kim, 2016 & Jafari, 2017**). It's necessary for working women to realize the severity of menopausal symptoms and its effects on life to make plan for care of menopausal women to better health. So, the study aimed to assess menopausal symptoms and marital adaptation among working women.

AIM OF THE STUDY

The aim of the study was to assess menopausal symptoms, stress and marital adaptation among working women.

Research questions:

1. What are menopausal symptoms among menopausal working women?
2. What is marital adaptation score among menopausal working women?
3. Are there relation between menopausal symptoms and marital adaptation among menopausal working women?

SUBJECTS AND METHODS

Research Design:

Descriptive cross-sectional research design was used to accomplish the aim of this study.

Research Setting:

The present study was conducted among menopausal working women in Zagazig University.

Setting description:

Zagazig University was established in 1974 and it consists of faculties and administrative buildings, every faculty consisted of five floors, employees were taken from first and second floor and administrative buildings consisted of four or five floors, there are about three or four employees in each office.

Sample and sampling:

A purposive sample consisted of 160 menopausal working women plus 16 women shared in the pilot study and

excluded from the study sample according to the following criteria:

Inclusion criteria

- Married women at menopausal age 45 to 55 years.
- Women have symptoms of menopause.
- A wife lives with her husband.
- Willing to participate in the study.

Exclusion criteria:

- Women who had severe medical conditions such as Hysterectomy, oophorectomy or receiving chemotherapy and radiotherapy.
- Women receiving hormonal replacement therapy.
- Women who had a psychiatric illnesses.

Sample size:

The sample size was calculated by software Epi-info package, assuming a prevalence of moderate marital adaptation among total working women in Zagazig University (270) about 74.0% (Ghattas et al., 2019), level of confidence 95% and power of test were 80%. The sample size will be 142.

The sample size determined according to the following equation;

$$n = \frac{N \times P(1 - P)}{[N - 1 \times (d^2 \div z^2)] + P(1 - P)}$$

(Steven K. Thompson, 2012)

So, according to the calculations the sample size = 142 subjects.

After adding 10% dropout, final sample size = **160** subjects.

Tools of data collection:

Three tools were used to carry out the present study.

Tool I: A structured interview questionnaire was used to collect data about the general characteristics of the study subjects. It consisted of two parts:

Part 1: Socio-demographic characteristics:

It was designed to collect data about demographic characteristics of the study subjects and their husbands such as age,

residence, women education, wife job, husband education, husband job, family income, as well as this part cover questions about home characteristics and social class as home environment, family size, crowding index, family type and social class

Scoring system of social class:

This part was used to assess social class and demographic characteristics of the participants. It adapted by Jayasinghe et al (2021), which include; age, class, place of residence, fathers' and mothers' educational level, fathers' and mothers' job, number of family member, number of rooms in the house, family income, and the condition of the house. The total score is 48 and the social class score is classified as

Low social class: < 40% (< 19.2)

Medium social class: 40 to <70 % (19.2-< 33.6)

High social class: >70 % (33.6- 48)

Part 2: Medical and menstruation history

It included chronic diseases such as cardiovascular disease, diabetes mellitus disease, thyroid gland disease, osteoporosis, hypertension, pulmonary disease, psychiatric disease and menstrual history that included age at menarche, amount, duration, rhythm, and interval of menstruation, age at menopause.

Tool II: The menopause rating scale

Menopause rating scale evaluates menopause symptoms and the severity of these symptoms and developed by (Monterrosa et al., 2016 & Blümel et al., 2018). It involved 11 questions classified into three categories as the following:

1. Physical category: It involved four questions to assess physical symptoms as hot flushes/sweating, heart discomfort, sleeping problems, and joint and muscular discomfort.

2. Psychological category: It involved four questions to assess psychological symptoms as depressive mood, irritabilities, anxiety, physical and mental exhaustion.

3. Urogenital category: It involved three questions to assess urogenital symptoms as

sexual problems, bladder problems and dryness of vagina.

Scoring system of the menopause rating scale: Adopted from (Ahsan et al., 2015)

The questions are on a likert type scale, scored from 0 to 4, zero considered free from symptoms of menopause and four considered severe symptoms of menopause. The total score of the MRS is between 0 (asymptomatic) and 44 (highest degree of complaints), the total score of MRS: mild symptoms 0-11, moderate symptoms 12-23 and severe symptoms 24-44

Tool III: Dyadic adjustment scale (DAS)

The scale assesses marital adaptation and it developed by Spanier⁽¹⁴⁾. It consisted of 32 questions and divided into four domains; dyadic consensus, dyadic satisfaction, affective expression and dyadic cohesion.

1. Dyadic consensus domain:

It is used to identify the level of agreement between married couples on important subjects and consensus between married couples, it included questions (1-13).

2. Dyadic satisfaction domain:

It is used to determine the positive and adverse characteristics related to emotions and communication, it comprises questions (14-23).

3. Affective expression domain:

It identifies affectionate behavior and agreement on the form of affection displayed, it comprises questions (24-27).

4. Dyadic cohesion domain:

It determines the time couples spend together. It comprises questions (28-32).

Scoring system:

The highest maximum score for dyadic consensus domain was 65 and dyadic satisfaction domain was 50 as well as the highest maximum score for Affective expression and dyadic cohesion domain were 12, 24 respectively. The total score of the DAS is 151 and marital adaptation classified as minimum marital adjustment score (0-50), moderate marital adjustment

score (51-100) and maximum marital adjustment score (101-151) after consulting statistician (Ghattas et al, 2019).

Content validity:

Once prepared, the tools were tested by a panel of three experts, two professors from the community health nursing, faculty of nursing, Zagazig University and one professor from obstetric and gynecological medicine, faculty of medicine, Zagazig university. They assessed the tools for clarity, relevance, application, and comprehensiveness. This constituted the content validation of tool.

Reliability:

Menopause rating scale and dyadic adjustment scale reliability was evaluated, and the results indicated a satisfactory level of reliability with a Cronbach's Alpha coefficient of 0.83, 0.82 respectively.

Field work:

Once permission was granted to proceed with the study, the researcher met with general director of the faculties and administrative buildings, explained the study aim and procedures, as well as the data collection forms. Through collaboration between the director of each place and the researcher, the menopausal women were met with the researcher, after that, the researcher spent time with menopausal women to be familiar with the researcher. The researcher explained the aim of the study and asked for their acceptance in filling the questionnaire.

The duration of collecting tools was carried out six months from the first of May 2022 to the first of October 2022. The researcher went to selected places in Zagazig University 2 to 3 days per week from 10 AM to 12 PM. The needed time for collecting tools for each women was about 30-45 minutes, around 5 to 7 women were met a day.

Pilot study:

The pilot study was carried out on a sample of 16 menopausal women representing 10% of the calculated total sample size. The aim was to test the clarity of the questions, the format of the

questionnaire, the comprehensiveness of the items and to estimate the exact time required for filling the questionnaire sheet. Menopausal women involved in the pilot study were excluded from the main study sample, since there was no modification in the tool of data collection.

Administrative design:

The official permission was obtained from the general director of administrative affairs at Zagazig University based on letters issued from the post graduates department at the Faculty of Nursing, Zagazig University explaining the aim and procedures of the study. Then, the director of administrations referred the researcher to the directors of the selected faculties and administrative buildings with approval letters. Then the researcher met with each of them and explained the aim of the study and the nature of the tool used for collecting data.

Ethical consideration:

Firstly, the research protocol was approved by the Research Ethics Committee (REC) in the faculty of Nursing, Zagazig University. Then, the agreement of participants women was taken after a full explanation of the aim of the study. Participants were given the opportunity to refuse participation and they were notified that they could withdraw at any time during the data collection interviews; also, they were assured that the

information would be confidential and used for the research purpose only. The researcher assured maintaining anonymity and confidentiality of the subject's data.

Statistical design:

Data entry and statistical analysis were done using SPSS 22.0 statistical software package. Data were presented using descriptive statistics in the form of frequencies and percentages for qualitative variables, and means and standard deviations and medians for quantitative variables. The Cronbach alpha coefficient was calculated to assess the reliability of the developed tools through their internal consistency. Qualitative categorical variables were compared using a chi-square test (X^2). Whenever the expected values in one or more of the cells in a 2x2 tables was less than 5, Fisher exact test was used instead. The Spearman rank correlation was used for assessment of the interrelationships among quantitative variables and ranked ones. In order to identify the independent predictors of the menopausal symptoms severity, stress level, and marital adaptation scores multiple linear regression analysis was used after testing for normality, and homoscedasticity, and analysis of variance for the full regression models were done. Statistical significance was considered at p-value <0.05.

Results:

Part I. General characteristics of the studied women

Table (1): Distribution of the studied women according to their socio-demographic characteristics (n=160)

Socio-demographic characteristics	Frequency	Percent
Age:		
45-49	37	23.1
50-55	123	76.9
Mean ± SD	53.31 ± 2.57	
Range	(45 – 55)	
Residence:		
Rural	64	40.0
Urban	96	60.0

Women (wife)Education:		
Two years institute	43	26.8
University	106	66.3
Post graduate / Higher Studies	11	6.9
Wife job:		
Administrative work	160	100.0
Husband education:		
Secondary education	33	20.6
University / post graduate	127	79.4
Husband Job:		
Craftsman	27	16.9
Businessman/ tradesman	19	11.9
Employee	73	45.6
Professional [teacher, doctor, lawyer....]	41	25.6
Family income:		
Not enough & loan	6	3.8
Only enough daily needs	152	95.0
Enough daily needs & emergency	2	1.3

Table 1 shows socio-demographic characteristics of the studied women. It shows that 76.9 % of the studied women were at age group 50-55 years with mean age 53.31 ± 2.57 years, 60 % of them residing in urban area, 66.3 % graduated from university and 95% reported their income were only sufficient for daily needs.

Table (2): Distribution of the studied women according to their socio-demographic characteristics (n=160)

Socio-demographic characteristics	Frequency	Percent
Home environment		
Clear water	160	100.0
Electricity	159	99.4
Normal gas	108	67.5
Sanitation	160	100.0
Garbage collected locally	160	100.0
Family size		
< 5	48	30.0
5-6	106	66.3
≥ 7	6	3.8
Crowding index		
<2	121	75.6
2+	39	24.4
Family type		
Extended [have family]	23	14.4
Nuclear [have children, father, mother]	137	85.6
Social class		
Medium	6	3.8
High	154	96.2

Table 2 continued showing socio-demographic characteristics of the studied women. As regards home environment, all women had clear water, sanitation and Garbage collected

locally. It also shows that family size was 5-6 in 66.3% of them, 85.6% of family type was nuclear (have children, father, mother) and 96.2% of social class was high.

Table (3): Medical and menstruation history of menopausal working women in the study sample (n=160)

Medical History	Frequency	Percent
Diseases:[@]		
Diabetes	143	89.4
Hypertension	132	82.5
Cardiovascular diseases	40	25.0
Osteoporosis	17	10.6
Respiratory diseases	9	5.6
No. of diseases:		
1-2	118	73.8
3-4	42	26.2
Mean ± SD	1.26 ± 0.44	
Age of menarche in years		
11-12	46	28.8
13-15	114	71.2
Mean ± SD	13.01 ± 0.97	
Amount of menses:		
Mild	44	27.4
Moderate	58	36.3
Severe	58	36.3
Duration of menses:/ days		
Four days	29	18.1
Five days	90	56.3
Six days	41	25.6
Mean ± SD	5.08 ± 0.66	
Regularity of menses: Interval		
Regular	43	26.9
Irregular	117	73.1
Age of menopause:		
45-49	39	24.4
50- 54	121	75.6
Mean ± SD	50.46 ± 1.65	

@ Responses are not mutually exclusive

Table 3 clarifies medical and menstrual history of the studied women. It clarifies that 89.4% and 82.5% respectively of menopausal working women had diabetes and hypertension. As for menstrual history, age of menarche was 13-15 years in 71.2% of them, 36.3% of them had severe amount of menses and 73.1% their menses were irregular and the mean age of menopause was 50.46 ± 1.65 years among the study subject.

Part II. Menopausal symptoms severity and marital adaptation among menopausal working women

Table (4): Menopause symptoms severity among working women in the study sample (n=160)

Menopause symptoms	None		Mild		Moderate		Severe	
	No.	%	No.	%	No.	%	No.	%
Somatic symptoms								
Hot flushes, sweating	0	0.0	23	14.4	42	26.3	95	59.4
Heart problems	0	0.0	14	8.8	92	57.5	54	33.6
Sleep problems	0	0.0	9	5.6	102	63.8	49	30.6
Joint and muscular discomfort	4	2.5	12	7.5	88	55.0	56	35
Mean ± SD	9.06 ± 1.26							
Psychological symptoms								
Depressive mood	0	0.0	36	22.5	109	68.1	15	9.4
Irritability	0	0.0	47	29.4	101	63.1	12	7.5
Anxiety	0	0.0	70	43.8	66	41.3	24	15
Physical and mental exhaustion	0	0.0	90	56.3	54	33.8	16	10.0
Mean ± SD	6.91 ± 1.83							
Urogenital symptoms								
Sexual problems	0	0.0	12	7.5	86	53.8	62	38.8
Urinary problems	2	1.3	6	3.8	78	48.8	74	46.3
Dryness of vagina	2	1.3	8	5.0	65	40.6	85	53.2
Mean ± SD	7.19 ± 1.32							
Total Mean ± SD	23.48 ± 2.63							
Range	16.0-28.0							

Table 4 describes menopause symptoms among working women. Regarding somatic symptoms, it clarifies that 59.4% of menopausal working women had severe hot flushes and sweating, 57.5% had moderate heart problems, 63.8% of them had moderate sleep problems and 55.0% had Joint and muscular discomfort. Concerning psychological symptoms, this table shows that women with moderate depressive mood were 68.1%, women with moderate irritability and mild anxiety were 63.1% and 43.8% respectively and 56.3% of them had mild physical and mental exhaustion. Regarding urogenital symptoms, 53.8% of them had moderate sexual problems, while 46.3% and 53.2% respectively of women had severe urinary problems and severe dryness of vagina. Further-more, it shows that the highest mean score for menopause symptoms severity was somatic symptoms (Mean ± SD 9.06 ± 1.26) while the lowest mean score was psychological symptoms (Mean ± SD 6.91 ± 1.83).

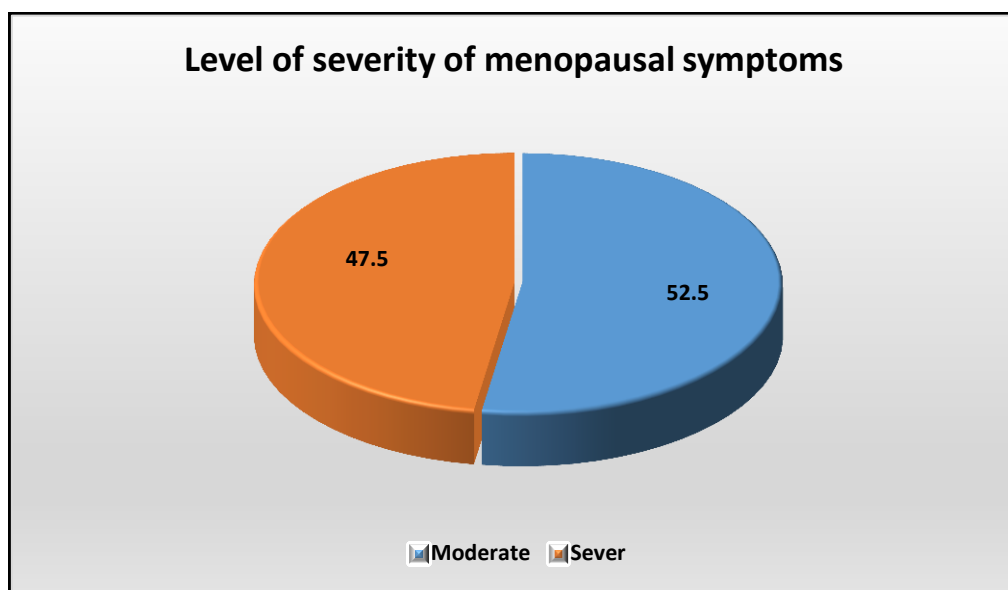


Figure 1: Distribution of the studied women according to severity of menopausal symptoms

Figure 1 portrays that 52.5% of menopausal women had severe total symptoms.

Table (5): Mean of marital adaptation domains among studied menopausal working women (n=160)

Marital adaptation domains	Mean	SD
Dyadic consensus	54.58	3.21
Dyadic satisfaction	33.09	2.84
Affective expression	6.58	1.08
Dyadic cohesion	10.90	2.25

It is evident in **table 5** that shows that the highest mean score of the marital adaptation domains was dyadic consensus (54.58 ± 3.21) while the lowest mean score domain was affective expression (6.58 ± 1.08).

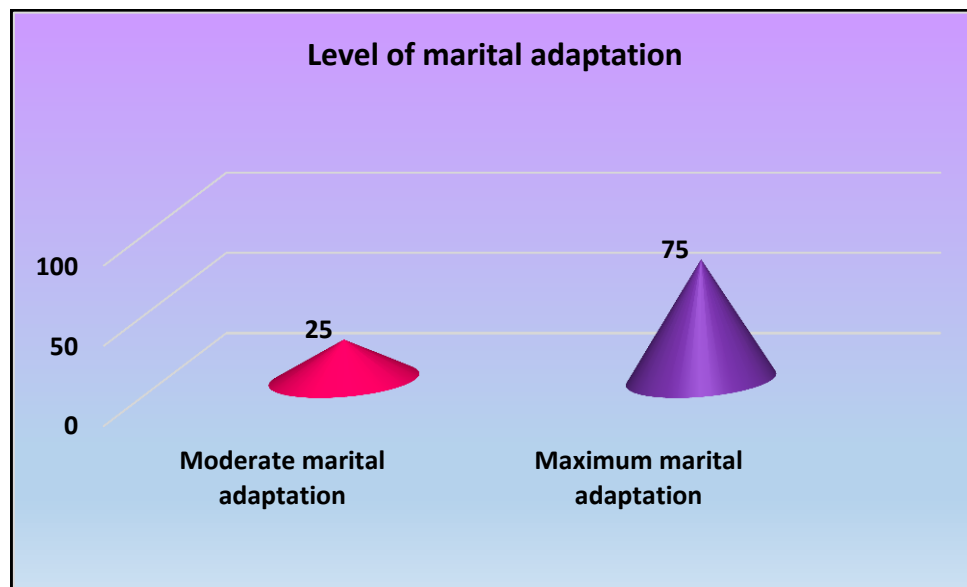


Figure 2: Distribution of the studied women according to marital adaptation distribution among studied women (n=160)

Figure 2 shows marital adaptation among the studied women. It demonstrates that 75% of women had maximum level of marital adaptation.

Part III. Correlates and predictors of the studied variables

Table (6): Correlation matrix of menopausal symptoms severity, stress level, and marital adaptation

Scores	Total Mean score	
	Menopausal Symptoms Severity	Marital Adaptation
Menopausal Symptoms Severity		- 0.052
Marital Adaptation	-0.052	

r (P) Pearson correlation test & P for r test (*) Statistically significant at $p < 0.05$

Table 6 indicates that non significant negative correlation was found between menopausal symptoms severity and marital adaptation.

Table (7): Correlation matrix of menopausal symptoms severity and marital adaptation and their general characteristics

General Characteristics	Spearman's rank correlation coefficient	
	Menopausal Symptoms Severity	Marital Adaptation
Age	0.187*	-0.072
Residence	-0.133	0.169*
Wife education	-0.144	0.283**

Husband Education	-0.173*	0.257**
Family type	-0.181*	0.137
Family size	0.191*	-0.175*
Social class	0.078	0.046
No. of chronic diseases	0.119	0.085
Menstruation age	0.195*	-0.047
Menopause age	0.115	-0.080
Menses amount	0.122	-0.086
Menses duration	0.129	-0.106
Menses interval regulation	0.050	0.006

(*) Statistically significant at $p < 0.05$

(**) statistically significant at $p < 0.01$

Table 7 shows that statistical significant positive correlations were found between menopausal symptoms severity and women age, family size and menstruation age ($r = 0.187^*$, 0.191^* , 0.195^*) respectively while statistical significant negative correlations were found between menopausal symptoms severity and husband education and family type ($r = -0.173^*$, -0.181^*) respectively. On the other- hand, statistical significant positive correlations were found between marital adaptation and residence, wife education and husband education ($r = 0.169^*$, 0.283^{**} , 0.257^{**}) respectively while statistical significant negative correlation was found between marital adaptation and family size ($r = -0.175^*$).

Table (8): Best fitting multiple linear regression model for working women's menopausal symptoms severity score

Items	Unstandardized Coefficients		Standardized Coefficients	t	Sig.	95.0% Confidence Interval for B	
	B	Std. Error	Beta			Lower Bound	Upper Bound
(Constant)	23.190	3.459		6.704	0.000	16.356	30.024
Age	1.039	0.474	0.167	2.190	0.030	.102	1.975
Husband education level	-0.655	0.545	-0.101	-1.201	0.231	-1.731	0.422
Family type	-0.697	0.668	-0.093	-1.043	0.299	-2.018	0.623
Family size	0.567	0.430	0.112	1.318	0.190	-0.283	1.417
Menstruation age	1.144	0.443	0.197	2.582	0.011	0.269	2.019
Menses amount	0.286	0.260	0.087	1.101	0.272	-0.227	0.800

R-square=0.13 Model ANOVA: $F = 3.87$, $p < 0.05$

Table 8 presents best fitting linear regression model for working women's menopausal symptoms severity score, it indicates that women age and menstruation age were statistically independent positive predictor of menopausal symptoms severity score, the regression model explains 13% variation in symptoms severity as indicated by r square value.

Table (9): Best fitting multiple linear regression model for menopausal working women's marital adaptation score

Items	Unstandardized Coefficients		Standardized Coefficients	t	Sig.	95.0% Confidence Interval for B	
	B	Std. Error	Beta			Lower Bound	Upper Bound
(Constant)	2.119	0.682		3.109	0.002	0.773	3.466
Setting	0.037	0.083	0.041	0.440	0.661	-0.128	0.201
Wife educational level	0.129	0.077	0.162	1.671	0.097	-0.023	0.280
Husband education level	0.117	0.103	0.109	1.140	0.256	-0.086	0.319
Family size	-0.035	0.048	-0.067	-0.727	0.468	-0.131	0.061
Family type	-0.015	0.124	-0.012	-0.119	0.905	-0.260	0.230
Stress level score	-0.186	0.090	-0.167	-2.065	0.041	-0.363	-0.008
Menopause symptoms severity	0.004	0.013	0.022	0.280	0.780	-0.022	0.029

R-square=0.128 Model ANOVA: F=3.18, p<0.05

Table 9 presents best fitting linear regression model for menopausal working women's marital adaptation score, it indicates that stress level score was statistically independent negative predictor of marital adaptation score, the regression model explains (12.8%) variation in stress level as indicated by r square value.

Discussion:

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 (**Gupta & Kumari, 2021**).

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. It is necessary for working women to realize the severity of menopausal symptoms and its effects on life to make plan for care of menopausal women to better health (**Raj, 2021**).

The current study aimed to assess menopausal symptoms, stress and marital adaptation among working women. A purposive sample consisted of 160 menopausal working women at Zagazig University were included in the study.

The findings of the current study were discussed under main three sections which included women general

characteristics (socio demographic characteristics, obstetric and menstrual history), menopausal symptoms severity/ marital adaptation and correlation between the studied variables.

Regarding demographic characteristics of the studied menopausal working women, the current study revealed that more than three quarters of them were at age 50-55 years with mean age (53.31 ± 2.57). This could be due to the fact that this age is considered as the commonest mean age of menopause among women (**Vatankhah et al., 2023**).

This result was similar to **Karimi et al (2022)** in Iran who found that the mean age of the study participants was 54.50 ± 4.43 years. On the other hand a study carried out by **Zaman et al (2022)** in Pakistan stated lower mean age of the studied women (mean= 45.21 & $SD=7.47$) years, This discrepancy may be due to difference between the studied sample characteristics and different settings.

The present study results showed that less than two thirds of the studied menopausal working women were residing in urban area, This related to place of their job in Zagazig university so most of them residing in urban area. This result was in the same line with **Ghattas et al (2019)** in Egypt who reported that about two thirds of the studied participants were from urban area.

Besides, the current study results declared that about two thirds of the studied menopausal working women had university education, this due to job chances in Egypt require higher educational qualifications. On the contrary, a study in Korea conducted by **Lee (2018)** and mentioned that more than half of the studied women had secondary school education. Also, **Nazarpour et al (2020)** in Iran found

that nearly two thirds of the studied women were illiterate or merely knew reading and writing. This discrepancy might be due to difference in studied sample characteristics.

The current study findings indicated that the majority of the studied menopausal working women had family income that is only enough daily needs, this related to high prices and current living conditions in Egypt. Similarly, **Barati et al (2021)** in Iran found that the largest proportion of the studied women had mild economy status. Conversely, **Nazarpour et al (2021)** in Iran stated that more than half of the studied women had adequate or with saving income. This difference may be related to socioeconomic status of the studied sample.

As regard home characteristics & social class of the studied menopausal working women, the present study clarified that most of them had nuclear family (have children, father, and mother), this might be related to large proportion of the studied women live in urban area. This finding matched with the study of **Nazarpour et al (2021)** who demonstrated that the highest proportion of the studied women had nuclear family. Likewise, **Yoshany et al (2020)** in Iran reported that most of the studied women had nuclear family.

The current study results reflected that the majority of the studied menopausal working women social class was high, this related to they are working women like to enjoy high social class. This result was in agreement with **Erbil (2018)** in Alexandria who found that most of the studied women had high social class. Also, a study in Turkey conducted by **Yilmaz & Avci, (2022)** stated that most of the studied women had high social class.

Pertaining medical history of the studied menopausal working women, the present study clarified that most of them had diabetes and hypertension, this can be attributed to older age; as the age is a basic factor in occurrence of chronic diseases (McIntyre & WHO, 2015). This finding was congruent with a study in Turkey by Taşkıran & Özgül, (2021) who reported that the highest proportion of the studied women had chronic diseases.

While, this result was against Huang et al (2021) in China who stated that less than one fifth of the studied women had diabetes and hypertension, this discrepancy might be related to the difference between characteristics of the studied sample.

As regards menstrual history of the studied menopausal working women, the present study results showed that age of menarche in less than three quarters of the studied menopausal working women was 13-15 years. This result agreed with Hoshiyar et al (2021) in Iran who found that the mean age of the studied women first menstruation was 13.11 ± 1.56 year. Also, Ebrahimi & Rahimi, (2019) in Iran stated that most of the studied women age of menarche was between 13 to 15 years old.

The current study results declared that more than one third of the studied menopausal working women had moderate and severe amount of menses, this related to physiological changes of nature of women body differ from one to another (Kepley, et al., 2023). In the same line, Krzyżanowska & Górecka (2021) in Poland reported that the largest percentage of the studied women had moderate amount of menses.

The current study findings stated that nearly three quarters of the studied menopausal working women had irregular menses, this related to the age of menopause due to hormonal changes (WHO, 2022). This result was in accordance with Lama & Oqba (2018) in the north of Jordan and stated that most of studied women had irregular menstruation.

On contrary, Dastgerdi et al (2020) in Iran reported that most of the studied women still having regular menses, This discrepancy might be due to difference between the studied subjects' characteristics.

The present study results indicated that about three quarters of the studied women menopausal age was 50-54 years, this due to this age related to menopause period. This result was supported by with Rathnayake et al (2019) from Sri Lanka who reported that the mean age of the studied women at menopause was 48.3(3.98) years. Besides, Tavoli et al (2021) in Iran reported that mean age at menopause was 47.3 (5.85) years.

Regarding answering the first research question about symptoms severity among the menopausal working women, the current study results represented that more than half of them had severe hot flushes and sweating, nearly two thirds of them had moderate sleep problems, this related to changes in hormones in menopause stage and sociocultural factors and the main reason for menopausal symptoms is reduction of estrogen production by the ovaries (Namazi et al., 2019). These findings were in harmony with Song et al., (2022) in China who mentioned that about two thirds of the studied women experiencing moderate sleep difficulties and nearly two thirds of

them had severe hot flashes and sweating.

In contrast, **Sharifi et al (2019)** in Iran mentioned that nearly two fifth of the studied women had moderate sleep disorders and nearly one third of them had very severe hot flashes and sweating. From the research investigator point of view, the result variations could be attributed to that the menopausal symptoms are influenced by socio-demographic/ sociocultural factors, economical stressors, general health status, and individual perception of menopause.

Additionally, the current study results reflected that the studied women with moderate depressive mood were more than two third and more than half of them had mild physical and mental exhaustion, this result might be due to Egyptians women are emotional and passionate, also due to life stressors. This result matched with **Abasi et al (2020)** in Northern Iran who found that the most common symptom was mild physical and mental exhaustion among most of the studied women and moderate depressive mood among more than two thirds of them.

Also, a study carried out by **Mohammed & Mohammed (2018)** in Egypt reported that the highest proportion of the studied women had mild to moderate psychological symptoms.

The present study clarified that more than half of the studied women had moderate sexual problems and women with severe dryness of vagina were more than half, this might be attributed to lack of awareness regarding menopause period and how to adapt with this period. Correspondingly, a study conducted by **Pérez-Herrezuelo et al (2020)** in Spain found that nearly half of the studied women had severe urogenital

symptoms. In contrast, **Senthilvel et al (2018)** in Kochi, South India reported that the majority of the studied women had sexual problems and nearly one third of them had vaginal dryness this due to culture diversity in sexual health.

The present study displayed that the highest mean score for menopause symptoms severity was somatic symptoms while the lowest mean score was psychological symptoms, the reason behind this might due to be the lack of awareness regarding the vasomotor symptoms of menopause period. Likewise, a study carried out by **Thapa et al (2021)** in Nepal mentioned that the highest percentage of menopause symptoms was somatic symptoms. On the other hand, **Devi et al., (2018)** in India found that somatic and psychological symptoms were the most prevalent menopause symptoms.

The current study illustrated that more than half of them had severe menopausal symptoms, this might be due to differences in cultural construction and understanding of menopausal symptoms. This result agreed with **Madan et al., (2019)** in India who reported that more than half of the studied women had severe menopausal symptoms.

Concerning answering the second research question about marital adaptation among the studied menopausal working women, concerning total mean of marital adaptation domains among the studied menopausal working women, the current study results represented that the highest mean score domain was dyadic consensus, while the lowest mean score domain was affective expression, This might be due to attributed to psychosocial and hormonal alterations during menopause. Also, menopausal changes affect women's social and sexual life.

This result was in accordance with a study performed by **Elsayed et al (2023)** in Egypt who found that dyadic consensus had the highest mean score as regard marital adaptation domains.

This finding disagreed with **Caglar et al (2020)** in Turkey who showed that dyadic adjustment scale score of the participants was found as 104.60 ± 32.98 (0-151). These results show that dyadic adjustment of women was low, This might be attributed to the setting, socio-demographic, sociocultural differences between the studied subjects.

Regarding level of marital adaptation among the studied women, the present study indicated that three quarters of them had maximum level of marital adaptation, this might be due to being independent financially and they try to adapt according to their circumstances. Conversely, **Yıkar et al (2019)** in Turkey who that the mean marital adjustment score of the studied women was 39.32 ± 11.01 , suggesting that women had low marital adjustment, This might be due to culture difference and traditions.

Related to correlation matrix of menopausal symptoms severity and marital adaptation and their personal characteristics, the present study highlighted that statistical significant positive correlations were found between menopausal symptoms severity and women age, family size and Menstruation age, This could be interpreted as older women; women with larger family size and older menstruation age have more severe symptoms.

This result was supported by **Koçak & Beji (2023)** in Turkey who mentioned that there was a positive correlation between the severity of menopausal symptoms and women age and menstruation age. In contrast, **Augoulea et al (2019)** in Greece

reported that there was a significant positive correlation between menopausal symptoms severity and women educational level, marital status, occupation and residence.

As regards the correlation between general characteristics and menopausal symptoms severity among menopausal working women, the present study results displayed that statistical significant negative correlations were found between menopausal symptoms severity and husband education and family type, This could be explained as women with high educated husband and nuclear family type have less severe menopausal symptoms. Somewhat parallel, a study carried out by **Zaman et al (2022)** who found that there was negative correlation between the severity of menopausal symptoms and husband education.

The present study results represented that there were statistical significant positive correlations between marital adaptation and residence, wife education and husband education, this reflect the fact that as the level of education increases the quality of marriage increase so, marital adaptation is better. while statistical significant negative correlation was found between marital adaptation and family size, this due to large family size decrease the degree of married couple effectively adapt and may occur family problem.

These findings were in accordance with a study conducted by **Yıkar et al (2019)** and clarified that there was significant positive correlations between marital adjustment and women residence, education and husband education. Similarly, a study carried out by **Bülbül et al (2021)** who reported that there was negative correlation between

marital adaptation and the studied women family size.

As regard best fitting multiple linear regression model for working women's menopausal symptoms severity score, the present study indicated that women age and menstruation age were statistically independent positive predictor of menopausal symptoms severity score, this might be due to hormonal and biochemical changes give rise to various symptoms in the women's body (Ceylan, 2015). This result was congruent with, a study carried out by Wang et al (2021) who stated that women age and menstruation age were factors that positively affecting their menopausal symptoms severity score.

Regarding best fitting multiple linear regression model for menopausal working women's marital adaptation score, the present study illustrated that stress level score was statistically independent negative predictor of marital adaptation score, this reflect that communication skills, intimacy and conflict resolution techniques are traits that predict marital satisfaction while negative communication and stress are predictions of dissatisfaction in marriage. In the same line, a study conducted by Rema & Parneet (2020) in India found that negative relationship between stress and marital adaptation among married women.

CONCLUSION

According to the present study findings, it can be concluded that almost half of menopausal working women had severe symptoms. Marital adaptation was at maximum level in three fourth of working women. Moreover, non significant relation was found between menopausal symptoms severity and marital adaptation.

RECOMMENDATIONS

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

- ✚ Periodical assessment of menopausal symptoms, stress level and marital adaptation in menopausal women are to be performed which may be helpful for developing appropriate intervention.
- ✚ Health education program for menopausal women to increase awareness about symptoms of menopause and how to adapt with this period.
- ✚ Further studies are needed to assure study results.

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