Lifestyle and Prediction of Menopausal Symptoms Among Sample of Women in Jordan

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Received: 10/1/2022

Accepted: 29/3/2022

Abstract

The study aimed to identify the lifestyle of a sample of women in menopause and the ability to predict the physical and psychological symptoms associated with this stage. The study sample consisted of 296 Jordanian women, whose ages ranged between 45 - 65 years, the participants answered a questionnaire prepared for this purpose. The statistical analysis showed that the levels of physical and psychological symptoms among women in menopause are medium level, and that their lifestyle is also medium level. The results also showed that there is a relationship between lifestyle and the physical and psychological symptoms. The study recommended providing psychological counseling services about the nature of menopause and the mechanism of improving their lifestyle to reduce physical and psychological symptoms.

Keywords: Lifestyle, Physical Symptoms, Psychological Symptoms, Menopause.

نمط الحياة والتنبؤ بأعراض سنَ الأمل لدى عينة من النساء في الأردن

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ملخص

هدفت الدراسة إلى التعرف على نمط حياة عينة من النساء في سن اليأس والقدرة على النتبؤ بالأعراض الجسمية والنفسية المرتبطة بهذه المرحلة، تكونت عينة الدراسة من ٢٩٦ سيدة أردنية، تراوحت أعمارهن بين ٤٥ – ٦٥ سنة، أجابت المشاركات على استبيان تمَّ إعداده لهذه الغاية، أظهر التحليل الإحصائي أن مستويات الأعراض الجسدية والنفسية لدى النساء في سن اليأس متوسطة، وأسلوب الحياة لديهن بدرجة

Manarah, Educational and psychological sciences Series, Volume 1, No.1, 2022 (273)

متوسطة أيضاً، كما أظهرت النتائج وجود علاقة بين أسلوب الحياة والأعراض الجسميّة والنفسيّة، أوصت الدراسة بتقديم خدمات إرشاد نفسي حول طبيعة سنّ الأمل وآلية تحسين أسلوب حياتهن للحدّ من الأعراض الجسمية والنفسية.

Introduction:

Menopause is the time when a woman stops menstruating for 12 consecutive months, women go through the menopausal transition from their mid to late forties to mid-fifties, and that about 75% of menopausal women experience very unpleasant symptoms such as night sweats, emotional weakness, sleep difficulties, fatigue, headaches, joint and muscle pain, vaginal dryness, loss of sexual desire and hot flashes, these symptoms are related to the prevailing societal culture (Lund, Siersma, Christensen, Waldorff & Brodersen, 2018)

Women experience menopause between 40 and 58 years, and the average age is 51 years. Menopause stage of related with many physical and psychological symptoms, which affect the quality of life, and associated with several social changes, menopause may be associated with health problems because of low estrogen levels, it has been shown that physical activity enhances the quality of life among postmenopausal women and is associated with a decrease in hot flashes. It is known that increased production of endorphins may lead to stabilization of thermoregulation, it is known that it is affected during menopausal hot flashes, physical activity may also help in controlling body weight, which is associated with more reporting of recurrent vasomotor symptoms, it has been shown that weight gain in middle age may impair quality of life. The transition to menopause can be considered a 'window of opportunity', that is whether of lifestyle modification during the transition to menopause.(Moilanen et al,2012)

Health is "a state of complete physical, mental and social well-being," and that a positive state of health cannot be reduced to the absence of disease alone, a range of factors contribute to an individual's health and risk factors for disease, including environmental, economic factors, social conditions, and behavioral characteristics of an individual such as smoking, diet, and physical activity, which is known as lifestyle, many lifestyle habits can contribute to a person's risk of disease, including smoking, alcohol, physical activity, unhealthy food, and psychological stress, health related quality of life was described in the 1970s as a measure of how an individual's physical and mental health affects their functioning. Quality of life can be among the most important indicators of health, there is evidence that lifestyle may also influence the reality of an individual's life (Fortier, 2015)

There is a relationship between menopause symptoms and quality of life, so it is imperative for women to have a healthy lifestyle such as exercising, eating healthy foods that are low in calories and low in salt, and taking into account that food contains appropriate proportions of calcium and vitamin D, and focus on eating fruits, vegetables and fish, taking into account abstaining from smoking, which carries with it many risk factors for the heart, arteries and respiratory systemin addition to other risks.(Ozcan, 2019)

Problem of the Study:

Women face many issues related to psychological and physical construction, which are important but ambiguous issues to the public. Among these issues women face are difficulties in the menopause stage, especially since these difficulties coincide with their performance of new roles such as becoming a grandmother or mother-in-law or being on the threshold Major career changes or approaching retirement

Women in menopause suffer from many physical and psychological symptoms, which negatively effect on their lives and reduce their efficiency, because of a decrease in the level of estrogen. As a result of the increased age of life, the period that women spend after menopause is a long time, and the years of suffering from these symptoms are significant and have a profound impact on the performance and interaction of women at the personal and professional level. It is known that the prevailing lifestyle of individuals is reflected on their health and psychological level, so the idea of this research came to know the prevailing lifestyle and its role in predicting the psychological and physical symptoms of menopause. and women play many overlapping roles, any risk exposed to affects their personal efficiency, the problem of the research lies in identifying the factors that may contribute to reducing the risk factors for the emergence of menopausal symptom, and through my multiple participation in many women's events, such as the Rihana Al-Usra Association, and women members of the Jordanian Women's Union, the idea of the research was crystallized, many women who have entered the menopause have expressed health and psychological complaints.

Study questions:

The current study aimed to answer the main study question:

- What is the predictive ability of lifestyle in predicting physical and psychological symptoms in a sample of women in Jordan at the menopause stage?

This question is divided into the following sub-questions:

- 1- What is the level of physical symptoms at menopause concerning a sample of women in Jordan⁹
- 2- 2. What is the level of psychological symptoms at menopause concerning a sample of women in Jordan?
- 3- What is the quality lifestyle at menopause concerning a sample of women in Jordan?
- 4- Are there statistically significant differences at the level ($\alpha \le 0.05$) in the appearance of physical symptoms and psychological symptoms among women in the menopausal stage due to the variables of age and work?
- 5- What is the predictive ability of the lifestyle to predict physical and psychological symptoms?

Literature:

A review of the previous literature found that there are many studies conducted on menopausal women across the world, the following is a review of some relevant studies:

In a study conducted by Bustami et al. (2021), the study aimed to assess factors related to the onset of natural menopause in a sample of Jordanian women, a cross-sectional study was conducted in early 2016. Through obstetrics and gynecology clinics at the University of Jordan Hospital. Women were 18 years of

age and older, and women who had surgically caused amenorrhea were excluded. Relevant data were collected using a questionnaire that included 30 questions. Considering socio-demographic variables, body mass index, chronic diseases, and reproductive characteristics, the hormonal indicators of menopause were tested by measuring estrogen (E2) levels. The study sample included 409 women between the ages of 20 and 75 years. With a mean of 48.5 ± 5.0 , the results showed that smoking was the main risk factor for early menopause among Jordanian women. On the other hand, women with symptomatic arthritis and diseases such as high blood pressure and diabetes were associated with late menopause. The study recommended to raise awareness and public health policy on the harmful effects of smoking on women's reproductive health.

This study was conducted by Addae & Ofosuhene-Mensah (2021) which aim to evaluating the effect of emotional intelligence on quality of life in postmenopausal women, the study used socio-demographic variables to know the relationship between emotional intelligence and quality of life, the sample was 260 women and the average age was 48.9 in the perimenopause period from Kumasi Metropolis, the purpose of data collection after tool validation, the criteria for determining menopause were used as a basis for classifying women's condition, noting the exclusion of chronic physical and mental health conditions, statistical analysis showed that emotional intelligence positively predicted the psychosocial dimension of quality of life, the analysis also showed the relationship of marital status ("single", "married", "divorced" and "deceased") and educational level ("primary", "secondary" and "level" higher") significantly increased the relationship between emotional intelligence and quality of life. Thus, it appears that emotional intelligence is positively related to the psychosocial aspect of quality of life in Ghanaian women, and thus, postmenopausal women with a high level of emotional intelligence are less likely to experience some psychological problems associated with menopause.

The study by Olowokere et al (2021) aimed to determine the lifestyle practices of menopausal women, their experiences of menopausal symptoms and the influence of lifestyle practices on their experiences of menopause-related symptoms. The sample was 271 postmenopausal women from rural communities in the Ado-Ekiti Local Government Area in Ekiti State, Nigeria, self-structured questionnaire was used to assess lifestyle practices while a modified menopause rating scale was used to evaluation symptoms associated with menopause in women. Data were analyzed using SPSS descriptive statistics, and the results showed that 58.3% had a poor lifestyle, while 41.0% and 0.7% had a moderate and good lifestyle, respectively, the results also showed that 66.4% of women experienced moderate symptoms related to menopause, while 15.5% and 0.4% of women experienced severe symptoms related to menopause, respectively. The result indicated that exercise and a good diet were associated with reduced symptoms associated with menopause, the study concluded that positive lifestyle modification can help reduce symptoms associated with menopause.

Ali et al. (2020) conducted a study aimed at examining the severity of psychological symptoms among Emirati women in the pre- and post-menopausal period. The research sample consisted of 60 women with an average age of 54.88 years. After applying the study procedures was found that vasovagal symptoms, weight gain and stress were all associated with symptoms of anxiety, depression, shortness of breath and memory problems. Psychological symptoms are prevalent among postmenopausal women, and are associated with vasomotor symptoms, fatigue, and changes in body composition (obesity). Psychological symptoms, along with vasomotor symptoms, express a major association with negative attitudes toward menopause. Therefore, intervention strategies may promote coping with psychological symptoms experienced by postmenopausal women.

Yoshany (2020) Completed a follow-up study which aimed to identify the lifestyle and severity of menopausal symptoms among women referred to health centers in the Iranian city of Yazd, the study period lasted five years, it was started in 2017 in Yazd, Iran. Menopause Rating Scale (MRS) questionnaires were answered, the relationship between lifestyle and severity of menopausal symptoms was investigated. Results showed an association between lifestyle and symptoms. Healthy lifestyle reduces the severity of menopausal symptoms, the study recommended that healthy lifestyles is important, including physical activity and a healthy diet in improving menopausal symptoms.

Kim & Mi Yang (2020) conducted a study to determine risk factors for cardiovascular disease in postmenopausal women, such as lack of physical activity and the nature of an unhealthy diet, and this study also aimed to determine the factors that affect maintaining a healthy lifestyle. This study included 21 postmenopausal Korean women aged between 54 and 69. The objective analysis was performed based on the health belief model, social cognitive theory, and planned behavior theory. As a result, healthy lifestyle modification and maintenance were identified, and promoting postmenopausal women to maintain a healthy lifestyle in terms of physical activity, healthy food, and self-regulatory strategies to incorporate health-promoting behaviors in daily routine of life

A study conducted by Olarinoye, Olagbaye, Olarinoye & Makanjuola (2019) purpose to identify some of the psychological and social factors that determine severity of postmenopausal symptoms of women in Ilorin, Nigeria. Women who naturally reached menopause were interviewed between 40-60 years old and using structured surveys to get some demographic and psychosocial information, menopausal symptoms were assessed by using Menopause Rating Scale (MRS), and Mental Parameters were correlated with MRS scores, this data was analyzed by SPSS software correlations between categorical variables, the results showed that the most pathological symptoms was joint pain, and also the evaluation of psychological and social data showed that social support played a major role in reducing the disturbing symptoms of menopause, the study recommended strengthening social support for women to help them improve the quality of life because it reflects on the psychological and health reality of women in Nigeria.

In Pakistan Arbab, Aqeel, Wasif & Ahmed (2018) conducted study aimed to know the relationship between menopausal symptoms and psychological factors of Pakistani women in menopause, before, during and after menopause, the study sample included 57 pre-menopausal women and 33 women in menopause and 60 postmenopausal women from various private and government hospitals in Peshawar, Islamabad, and Rawalpindi, from 2015 to 2016, age ranged from 40 to 60 years, study used scales: depression, anxiety and stress which measure psychosomatic, vasomotor sexual dysfunction, stress, anxiety, and tension, the results showed that

postmenopausal women tend to have physical, sexual dysfunction, and psychological symptoms compared to premenopausal women. The study recommended that the Physical and psychological women problems in menopause the necessity of providing care services to them at this stage.

Commenting on previous studies:

By looking at some previous studies, we find that women suffer from physical and psychological symptoms in the menopause stage, despite the differences in societies and cultures prevailing in them, the studies focused on determining the age of the study samples, as this is related to determining the stage of entering menopause

Method and procedures:

- Reviewing the theoretical literature and previous studies on the most prominent physical and psychological problems experienced by women in menopause.
- Reviewing the literature about the lifestyle of women in menopause.
- Preparing a study scale after reviewing the theoretical literature and benefiting from previous scales prepared for similar research topics such as: AMS Diagnosing Menopause: Symptom Score Sheet, Greene Climacteric Scale, Health-Promoting Lifestyle Profile II.
- Scale was included four axes, the first was demographic data.(Table (1) show the demographic data.) second was the physical symptoms of menopause, third was the psychological symptoms of menopause, fourth was the prevailing lifestyle among women in the menopause
- After extracting the validity and reliability coefficients for the scale, it was distributed via Google Form to the available sample of women in all governorates of Jordan.
- Collecting data, conducting statistical analysis, and extracting results to answer the study questions

variable	Category	Number	The ratio		
	45-50	140	47.3%		
Age	51-55	82	27.7%		
	56-60	50	16.9%		
	61-65	24	8.1%		
	Total	296	100%		
	Work	153	51.7%		
	Retired	59	19.9%		
Work	worked before	27	9.1%		
	do not work	57	19.3%		
	Total	296	100%		

 Table (1)

 Distribution of the sample members according to the study variables

Physical symptom scale:

The scale was prepared by the researcher after reviewing some of the scales such as:

- AMS Diagnosing Menopause: Symptom Score Sheet (Australasian Menopause Society 2015)
- Greene Climacteric Scale (Greene, J, A factor analytic study of climacteric symptoms Journal of Psychosomatic Research (1976), 20, 425–430.)

The scale consists of 12 items that measure the important physical symptoms which women experienced during menopause, the scale is based on a quadruple Likert scale, the validity and reliability of the scale were extracted to determine its suitability for the study. Score for scale: lowest 12, highest 48, medium 24

Validity internal construction:

The internal construction of the scale honestly means: the consistency of the questionnaire items with the dimension that it belongs, that is the phrase measures

what it is meant to measure. Pearson correlation coefficient was calculated between the degree of each statement and the total degree of the scale.

Paragraph	correlation coefficient	Paragraph	correlation coefficient
1	.546**	7	.663**
2	.598**	8	.669**
3	.713**	9	.719**
4	.727**	10	.725**
5	.615**	11	.737**
6	.605**	12	.633**

 Table (2)

 Correlation coefficients of the scale items with the total score of the scale

** Statistically significant at the significance level (0.01).

* Statistically significant at the significance level (0.05).

It is clear from the table (2) that all the correlation coefficients of the paragraphs of the scale with the total score of the scale are statistically significant at the level ($\alpha \leq$ 0.05), which ranged between (.546 and.737), and all these values are statistically significant, and this indicates the consistency of the internal construction of the scale, the scale it consists of (12) paragraphs in the final form.

stability:

The stability of the physical symptoms scale was using the "Cronbach's alpha" coefficient, table (r) show that:

Table (3)

Stability coefficient by Cronbach's alpha coefficient method for scale items

Scale	Cronbach's Alpha Stability
physical symptoms	0.88

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It is clear from table (3) that Cronbach's alpha coefficient for the total score of the scale was (.88), and this indicates that the scale has a good degree of reliability that can be relied upon in field application according to the Nunnally scale, which was adopted (.70) as a minimum stability.

Psychological Symptoms Scale:

Psychological Symptoms Scale was developed by review studies and theoretical literature, the scale was prepared by the researcher after reviewing some of the scales such as:

- AMS Diagnosing Menopause: Symptom Score Sheet (Australasian Menopause Society 2015)
- Greene Climacteric Scale (Greene, J, A factor analytic study of climacteric symptoms Journal of Psychosomatic Research (1976), 20, 425–430.)

The scale consists of (13) items, the scale is based on a quadruple Likert scale, Score for scale: lowest 13, highest 52, middle 26

Validity internal construction:

The internal construction of the scale expressions is honestly intended: the consistency of the questionnaire items with the dimension that belongs to it, meaning that the phrase measures what it is meant to measure and does not measure something else, Pearson correlation coefficient was calculated between the degree of each statement and the total degree of the scale.

Correlation coefficients of the scale items to the total score of the scale					
Paragraph	correlation coefficient	Paragraph	correlation coefficient		
1	.762**	8	.672**		
2	.762**	9	.715**		
3	.741**	10	.849**		
4	.658**	11	.722**		
5	.775**	12	.719**		
6	.780**	13	.166**		
7	.740**				

Table (4)

Correlation coefficients of the scale items to the total score of the scale

** Statistically significant at the significance level ($0 \le 01$).

* Statistically significant at the significance level ($0 \le .05$).

It is clear from table (4) that all the correlation coefficients of the scale items with the total score of the scale are statistically significant at the level ($\alpha \le 0.05$), which ranged between (.166 and.849), all these values are statistically significant, and this indicates the consistency of the internal construction of the scale, and therefore the scale consisted of (13) items in its final form.

Stability:

To ensure the stability of the physical symptoms scale, the stability was calculated using the "Cronbach's alpha" coefficient, and the table (5) shows these results.

Table (5)			
Scale Cronbach's Alpha Stability			
psychological symptoms	0.91		

It is clear from table (5) that Cronbach's alpha coefficient for the total score of the scale was (.91), and this indicates that the scale has a high degree of reliability that can be relied upon in field application according to the Nunnally scale, which was adopted (.70) as a minimum stability.

Lifestyle Scale:

The scale was prepared after referring to previous literature and scientific research that dealt with lifestyle like: - Health-Promoting Lifestyle Profile II and Lifestyle Questionnaire the scale may consist of (15) items in the latest version, the scale is based on a quadruple Likert scale and score for scale: lowest 15, highest 60, middle 30

The validity of the internal construction:

The internal structure of the scale phrases is honestly meant: the consistency of the questionnaire's paragraphs with the dimension, that is the phrase measures what it was set to measure, and accordingly the Pearson correlation coefficient was calculated between the score of each phrase and the total score of the scale, table (6) show that:

Correlatio	Correlation coefficients of the scale items to the total score of the scale					
Paragraph	correlation coefficient	Paragraph	correlation coefficient			
1	.484**	9	.434**			
2	.476**	10	.587**			
3	.612**	11	.616**			
4	.528**	12	.593**			
5	.486**	13	.637**			
6	.573**	14	.557**			
7	.603**	15	.544**			
8	.390**					

 Table (6)

 Correlation coefficients of the scale items to the total score of the scale

** Statistically significant at the significance level ($\alpha \le .01$).

* Statistically significant at the significance level ($\alpha \le 0.05$).

It is clear from table (6) that all the correlation coefficients of the scale items with the total score of the scale are statistically significant at the level ($\alpha \le 0.05$), which ranged between (.390 and.637), and all these values are statistically significant, and this indicates the consistency of the internal construction of the scale, and therefore the scale consists of (15) paragraphs in its final form.

Stability:

To ensure the stability of the lifestyle measure, the stability was calculated using the "Cronbach's alpha" coefficient, table () show these results:

Table (7)		
Cronbach's Alpha Stability	Scale	
0.82	Lifestyle	

It is clear from the table $(^{\vee})$ that Cronbach's alpha coefficient for the total score of the scale was (.82), and this indicates that the scale has a high degree of reliability that can be relied upon in field application according to the Nunnally

scale, which was adopted (.70) as a minimum stability.

Correction key:

It was considered that the scales (Likert Quadruple) used in the study should be graded according to the rules and characteristics of these scales as follows:

I do not suffer: 1

I suffer a little: 2

I suffer moderately :3

I suffer greatly: 4

The highest value - the lowest value of the answer alternatives divided by the number of levels, which are:

 $\frac{4-1}{3}$

3 = $\overline{\mathbf{3}}$ =1 This value is equal to the length of the category,

low level is from 1.00 _ 2.00

Medium level is from 2.01_3.00

High level is from 3.01 - 4.00

Results:

The results of the statistical analysis showed the following:

First: What is the level of physical symptoms at menopause concerning a sample of women in Jordan?

The arithmetic means and standard deviations of the women's scores on the physical symptom scale were calculated, and the level of symptoms was calculated, the table (8) shows these results:

Table (8)

Arithmetic averages and standard deviations of scores for postmenopausal women on the physical symptoms scale

Rank	Paragraph	Average arithmetic	Standard deviation	Level
1	I feel tired	2.88	0.87	Medium
2	I suffer from back pain	2.73	0.98	Medium

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Rank	Paragraph	Average arithmetic	Standard deviation	Level
3	I suffer from joint pain	2.68	0.95	Medium
4	I suffer from hair loss	2.57	0.98	Medium
5	I suffer from muscle pain	2.46	0.97	Medium
6	I suffer from dry skin	2.40	0.95	Medium
7	I suffer from headache	2.31	0.94	Medium
8	I suffer from frequent urination	2.24	1.05	Medium
9	I suffer from pressure and tension	2.16	1.04	Medium
	in the head			
10	I feel numbness in all parts of	2.10	1.01	Medium
	the body			
11	I suffer from hot flashes	2.03	1.02	Medium
12	I suffer from night sweats	1.91	0.99	Low
Total	physical symptoms	2.37	0.65	Medium

Table (8) shows that the general average of the total score for the physical symptoms scale was medium with an arithmetic mean of (2.37), while the arithmetic averages of the paragraphs ranged between (1.91 and 2.88), and the paragraph that states "I suffer from a general feeling of fatigue" ranked first with average arithmetic (2.88) at medium level, followed by the paragraph that states "I suffer from back pain" with an arithmetic average of (2.73) at medium level, and the paragraph that states "I suffer from joint pain" came in the third rank with an arithmetic average (2.68) at medium level, and it came the paragraph stating "I suffer from night sweats" is in the twelfth and last rank with an arithmetic mean (1.91) at a low level.

Second: What is the level of psychological symptoms at menopause concerning a sample of women in Jordan?

The arithmetic means and standard deviations of the menopausal women's scores on the psychological symptoms scale were calculated, and the level of

symptoms was calculated, table (9) show these results:

Arithme	rithmetic averages and standard deviations of the scores of postmenopausal				
Rank	women on the psychologic Paragraph	cal sympton Average arithmetic	ns scale Standard deviation	Level	
1	I lose interest in a lot of things	2.71	0.95	Medium	
2	I suffer from irritability	2.70	0.98	Medium	
3	I suffer from mood swings	2.69	0.98	Medium	
4	I suffer from anxiety	2.62	0.99	Medium	
	I have trouble remembering	2.62	0.93	Medium	
6	I have a nervous mood	2.49	0.95	Medium	
7	I suffer from loneliness	2.49		Medium	
8	I am experiencing some feelings of sadness	2.49	0.94	Medium	
9	I have trouble sleeping	2.23	1.00	Medium	
10	I have some depressive feelings	2.22	0.97	Medium	
11	I suffer from crying spells	1.92	0.92	Low	
12	I suffer from low self-esteem	1.88		Low	
13	I'm losing the meaning of life	1.81	1.00	Low	
Total	psychological symptoms	2.37	0.67	Medium	

Table (9) Arithmetic averages and standard deviations of the scores of postmenopausal women on the psychological symptoms scale

Table (9) shows that the general average of the total score for the psychological symptoms scale was medium with an arithmetic mean of (2.37), while the arithmetic averages of the items ranged between (1.81 and 2.71), and the paragraph that states "I feel I am losing interest in many things" ranked first. With an arithmetic average of (2.71) at medium level, followed by the paragraph that states "I suffer from irritability" with an arithmetic average of (2.71) at medium level, and the paragraph that states "I suffer from mood swings" came in the third rank with an arithmetic average (2.69) at medium level, the paragraph that states

"I suffer from a loss of the meaning of life" came in the thirteenth and last rank with an arithmetic mean (1.81) at a low level.

Third: What is the quality lifestyle at menopause concerning a sample of women in Jordan?

To answer this question, the arithmetic means and standard deviations of the women's scores in the menopause stage on the lifestyle scale were calculated, and the lifestyle level was calculated, the table (10) shows these results:

 Table (10)

 Arithmetic averages and standard deviations of menopausal women's scores on the lifestyle scale

Rank	Paragraph	average arithmetic	standard deviation	Level
1	I communicate with others positively	3.65	0.56	High
2	Share friends and family with social events	3.32	0.73	High
3	I feel satisfied and at peace with myself	3.27	0.81	High
4	I keep performing religious duties	3.23	0.69	High
5	I maintain balance in different aspects of my life	3.21	0.70	High
6	I keep eating vegetables and fruits	3.15	0.74	High
7	I accept the people, things, and events I can't change	3.02	0.80	High
8	I get enough sleep	2.76	0.91	Medium
9	I think about the good things before I sleep	2.60	0.89	Medium
10	I eat low calorie foods	2.54	0.82	Medium
11	I do fun activities with my friends	2.54	0.95	Medium
12	I take some time to relax	2.49	0.89	Medium
13	I keep walking daily	2.05	1.01	Medium
14	Keep regular doctor's checkups	1.92	1.04	low
15	I keep doing some exercise	1.87	0.86	low
Total	Lifestyle	0.45	0.45	Medium

Table (10) shows that the general average of the total score for the lifestyle scale was average with an arithmetic mean of (2.77), while the arithmetic

averages of the items ranged between (1.87 and 3.65), and the paragraph that states "I deal with others positively" ranked first with an arithmetic average (3.65) at a high level, followed by the paragraph that states "I share family and friends in social events" with an average of (3.32) at a high level, and the paragraph that states "I feel satisfied and at peace with myself" came in the third rank with an average of (3.27) at a high level, The paragraph that states "I keep doing some exercise" came in the twelfth and last rank with an arithmetic average (1.87) at a low level.

Fourth: Are there statistically significant differences at the level ($\alpha \le 0.05$) in the appearance of physical and psychological symptoms among women in the menopausal stage due to the variables of age and work?

To answer this question, the arithmetic averages, and standard deviations of the scores of women of menopausal stage were calculated on the physical symptoms scale according to the variables of age and work, where TWO Way ANOVA was used to determine the significance of the differences, table (11) show physical symptoms

Table (11)

Arithmetic averages and standard deviations of the scores of postmenopausal women in the physical symptoms scale according to the variable of age and work

variable of age and work					
variable	Category	standard deviation	average arithmetic	Number	
	45-50	0.63	2.45	140	
Age	51-55	0.60	2.30	82	
	56-60	0.69	2.22	50	
	61-65	0.77	2.52	24	
	Total	0.65	2.37	296	
	Work	0.58	2.56	153	
	Retired	0.58	2.19	59	
Work	worked before	0.72	2.28	27	

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variable	Category	standard deviation	average arithmetic	Number	
	do not work	0.72	2.10	57	
	Total	0.65	2.37	296	

Table (11) indicates that there are apparent differences between the arithmetic averages of the scores of women in the menopausal stage in the scale of physical symptoms according to the variables of age and work, and to determine whether the differences between the averages are statistically significant at the level ($\alpha \leq 0.05$) a binary analysis of variance was applied (TWO Way ANOVA), table (12) show these results:

Table (12)

The results of the two-way analysis of variance (TWO Way ANOVA) to find out the significance of the differences in the physical symptoms scale according to the variables of age and work

Variance	Sum of	Degree of	Mean	F value	Significance	
	squares	freedom	squares		level	
Age	2.757	3	0.919	2.432	0.065	
Work	11.717	3	3.906	10.337	0.000*	
Error	109.188	289	0.378			
Total average	123.843	295				

* Statistical significance at the level ($\alpha \le 0.05$)

It appears in table (12) that there are no statistically significant differences in physical symptoms according to the age variable; where the value of (P) reached (2.432) and at the level of significance (0.065), which is a non-statistically significant value, and the table shows the presence of statistically significant differences in the physical symptoms according to the work variable; where the value of (P) reached (10.337) with a level of significance (0.000), and to find out the source of the differences in the physical symptoms scale, Scheffe test was

conducted for dimensional comparisons, table (13) shows these results.

Scheffe's test for dimensional comparisons in the physical symptoms scale									
according to the work variable									
Work		difference between	Indication						
J	Ι	averages	level						
Work	Retired	.3699*	0.002						
Work	Worked and quit	0.2811	0.190						
Work	Do not work	.4628*	0.000						
Retired	Worked and quit	-0.0888	0.943						
Retired	Do not work	0.0929	0.882						
Worked and quit	Do not work	0.1817	0.659						

Table (13)

Worked and quit Do not work

* Statistical significance at the level ($\alpha \le 0.05$)

It appears in table (13) there are significant differences at the level ($\alpha \le 0.05$) in physical symptoms between those who are on the job, and the categories of retired and unemployed women on the other hand. and the arithmetic mean of those who are on the job was higher than the arithmetic means of the rest occupational status categories, while there were no statistically significant differences between those who were on the job and the category of those who worked for a while and left work, and there were no statistically significant differences between the rest of the work categories.

As for the psychological symptoms according to the variables of age and work, where TWO Way ANOVA was used to determine the significance of the differences, table $(1 \, \xi)$ show results of psychological symptoms:

variables of age and work								
variable	Category	standard deviation	average arithmetic	Number				
	45-50	0.65	2.45	140				
Age	51-55	0.69	2.29	82				
	56-60	0.69	2.33	50				
	61-65	0.68	2.31	24				
	Total	0.67	2.37	296				
	Work	0.60	2.55	153				
	Retired	0.71	2.23	59				
Work	worked before	0.67	2.28	27				
	do not work	0.70	2.11	57				
	Total	0.67	2.37	296				

 Table (14)

 Arithmetic averages and standard deviations of the scores of

 postmenopausal women in the psychological symptoms scale according to the

Table (14) indicates that there are apparent differences between the arithmetic averages of the scores of women in the menopausal stage in the psychological symptoms scale according to the variables of age and work, and to determine whether the differences between the averages are statistically significant at the level ($\alpha \le 0.05$) a Binary analysis of variance was applied (TWO Way ANOVA), table (15) show that

The results of the two-way analysis of variance (TWO Way ANOVA) the										
differences in the scores of menopausal women in the psychological										
symptoms scale according to variables of age and work										
Variance Sum of Degree of Mean Value Significance										
	squares		squares	F	level					
Age	0.612	3	0.204	0.480	0.696					
Work	9.172	3	3.057	7.196	0.000					
Error	122.780	289	0.425							
total average	133.451	295								

Table (15)

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* Statistical significance at the level ($\alpha \le 0.05$)

It appears in table (15) that there are no statistically significant differences in psychological symptoms according to the age variable; where the value of (P) reached (0.480) and a level of significance (0.696), the table shows the presence of statistically significant differences in the physical symptoms according to the work variable; where the value of (P) reached (7.196) with a level of significance (0.000), and to find out the source of the differences in the psychological symptoms scale, a Scheffe test was conducted for dimensional comparisons and a table (1°) shows these results.

Table (16)

Scheffe's test for dimensional comparisons in the psychological symptoms scale according to the work variable

V	Vork	difference between	Indication level
J	Ι	averages	
Work	Retired	.3192*	0.018
Work	Work Worked and quit		0.294
Work	Work Do not work		0.000
Retired	Retired Worked and quit		0.987
Retired	Retired Do not work		0.810
Worked and quit	Worked and quit Do not work		0.724

* Statistical significance at the level ($\alpha \le 0.05$)

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It appears in table (16) that there are significant differences at the level ($\alpha \leq 0.05$) in psychological symptoms between those who are on the job on the one hand and the retired and unemployed categories on the other hand, and the arithmetic average of those who are on the job was higher than the arithmetic average of the rest occupational status categories, while there were no statistically significant differences between those who were on the job and the category of those who worked for a while and left work, and there were no statistically significant differences between the rest of the work categories.

fifth: What is the predictive ability of the lifestyle to predict physical and psychological symptoms?

To answer this question, simple linear regression analysis was used to find out the proportion of the explained variance of the variable predicting lifestyle in the onset of physical symptoms, table (19) is a presentation of these results.

Table (19)

The results of simple linear regressions analysis to find out the percentage of the explanation of lifestyle variance in the onset of physical symptoms

Values Modified	Values R	Indication T	T Values	Beta β	Indication F	F Values	Standard error	Regression coefficient
R2								
0.041	0.211	0.000	-3.699	-0.211	.000	13.686	0.082	-0.304

It appears in table (1^{4}) that the regression model is significant, as the value of (P) reached (13.686) at the level of significance (.000), and given the value of (Modified R2), which amounted to (0.041), the explanatory variable (lifestyle) explains (4.1%) from the variance in the physical symptoms, and the Beta value that shows the predictive relationship of lifestyle and physical symptoms came with a value of (-0.211) with statistical significance, where the value of (t) reached (-3.699) with a level of significance (.000) and the Beta value was negative, this means that the better of lifestyle by one unit, less appearance of physical symptoms by (0.21) units.

As for the psychological dimension simple linear regression analysis was used to find out the proportion of the explained variance of the lifestyle predictor variable in the onset of psychological symptoms, the table (20) presentation these results:

Table (20)

The results of the Simple Linear Regressions analysis to find out the percentage of the explanation of lifestyle variance in the emergence of psychological symptoms

Values Modified	Values R	Indication T	T Values	Beta β	Indication F	F Values	Standard error	Regression coefficient
R2								
0.131	.362	0.000	-6.664	-0.362	.000	44.412	0.081	-0.543

It appears in table (20) that the regression model is significant, as the value of (P) reached (44,412) at the level of significance (.000), and given the value of (Modified R2), which amounted to (0.131), the explanatory variable (lifestyle) explains (13.1%) from the variance of psychological symptoms, and the Beta value that explains the predictive relationship, lifestyle and psychological symptoms, came with a value of (-0.362) with statistical significance, where the value of (t) reached (-6.664) with a significance level of (.000) and the Beta value was negative, this means that whenever the lifestyle improves by one unit, the appearance of psychological symptoms decreases by (0.36) units.

Discussion:

<u>First question:</u> What is the level of physical symptoms at menopause concerning a sample of women in Jordan?

There are many factors that lead to the emergence or reduction of symptoms, such as the suffering from genetic diseases and chronic diseases, which increases the possibility of the appearance of physical symptoms in the menopause stage, and a positive lifestyle such as healthy food and physical activity reduces the appearance of symptoms, and on the contrary, women who smoke more likely to suffer from physical symptoms, the symptom indicating a general feeling of fatigue was in the first degree, this is a logical result because feeling tired may be related of many health difficulties such as: back pain, joint pain, muscle pain, but night sweats which was in the low degree, It is more likely to appear as a result of other health difficulties, not just the hormonal system, and not only in the hormonal system, this is a realistic result. This result is like the findings of Yoshany (2020) and Kim & Mi Yang (2020) study on the relationship of life system and its relationship to physical symptoms.

Second question: What is the level of psychological symptoms at menopause concerning a sample of women in Jordan?

The results of the study also showed that women in menopause suffer from psychological symptoms with medium level, and this result is consistent with the level of physical symptoms, where the paragraph I feel a loss of interest in many things came in the first place, and this is a logical result because it reflects other psychological effects such as: irritability, mood swings, and anxiety. Whereas the paragraph I suffer from crying spells, I suffer from a negative view of myself, and I suffer from a loss of meaning of life, this paragraph refers to the state of despair and hopelessness, and it is considered one of the diagnostic criteria for depression according to the Depression DSM-5 Diagnostic Criteria, so this paragraph came in the last order because the women are normal and were not diagnosed as depressive disorders, The psychological symptoms that women suffer from in the current study are similar to what was indicated by psychological symptoms in study by Ali et al (200) & Arbab et al (2018)

<u>**Third question:**</u> What is the quality lifestyle at menopause concerning a sample of women in Jordan?

The results showed that the level of lifestyle for women in menopause is medium level, and this result is consistent with the physical and psychological symptoms, this means that medium level of lifestyle is associated with medium level of physical and psychological symptoms, when examining the paragraphs that indicated a high level of the lifestyle, we find that the paragraphs related to others and are associated with the social context, this result may be related to the prevailing societal culture that encourages communication with relatives and friends, in addition to the fact that women in menopause, especially at older ages, find a friends are a source of support, especially when their children have grown up and independent from the family, as they find fun and entertainment in relationships. With regard to the paragraphs that formed the lowest level of the lifestyle, which are the periodic reviews of the doctor, and the maintenance of exercise may be a reflection of the low awareness of the importance of periodic reviews to the doctor, or the visit to the doctor may be associated with anxiety about the possibility of diagnosing a diseased condition, and as for the lack of maintenance of exercise, it may be this is due to the state of fatigue and general stress experienced by women, which was indicated by the results of the physical symptoms scale.

Fourth question: Are there statistically significant differences at the level ($\alpha \le 0.05$) in the appearance of physical and psychological symptoms among women in the menopausal stage due to the variables of age and work?

The results showed that there were no statistically significant differences for the age variable on physical symptoms, and this result explains that physical symptoms are associated with menopause regardless of age, and that the main determinant of women's suffering is their entry into menopause, and that the decline in estrogen, which is reflected on physical condition, is not affected by age. It was also found that there was a statistically significant effect of the work variable with the appearance of physical symptom, working women suffer from added burdens because of work tasks. This is a logical result that the physical symptoms of menopause increase with the effort added to the woman as a result of work

On the other side the results showed that there were no statistically significant differences for the age variable on the appearance of psychological symptoms, and this result may be since advancing age does not affect the psychological symptoms of women in the menopausal stage because these symptoms appear with the entry of the menopause stage, the role of age lies at the time a woman enters menopause and then symptoms appear, not only age itself that affects the nature of symptoms, and there are also statistically significant results for the work variable in the psychological symptoms, and this is a logical result because work may constitute one of the sources of psychological stress facing women. The current study was similar to most of the previous studies in determining the age stage of the study sample, since age is one of the main indicators for determining entry into menopause, Like the study by Bustami et al. (2021), and the study of Ali et al. (2020) and the study of Arbab et al (2018), and the current study was distinguished from previous studies in studying the impact of work on the emergence of menopausal symptoms.

Fifth question: What is the predictive ability of the lifestyle to predict physical and psychological symptoms?

Through the results, it is shown that improving lifestyle contributes to reducing physical symptoms, this is a logical result consistent with the rationale of health care, this means that a healthy lifestyle based on healthy food, exercise, satisfactory social relationships, and the ability to manage stress all contribute to predicting a reduction in physical symptoms experienced by women in menopause, this was confirmed by previous studies: Bustami et al. (2021), and Olowokere et al (2021)

As a natural result of the association of physical symptoms with psychological symptoms, the stimuli that negatively or positively affect the physical situation may be stimuli that affect the psychological state, which was indicated by the results of the current study, and one of the most important stimuli is the lifestyle, whether negative or positive, and it includes many dimensions such as the quality of food, physical activity, the nature of social relations and strategies stress management

The results of current study are like those of study by Addae & Ofosuhene-Mensah (2021)& Olowokere et al (2021) Which indicated the role of good lifestyle in improving the psychological structure,, Whereas Yoshany (2020) focused on the study of the effect of healthy diet on the appearance of menopausal symptoms, and the current study dealt with the study of the integrated healthy lifestyle, study touched upon by Olarinoye, Olagbaye, Olarinoye & Makanjuola (2019) to the positive effect of social support in reducing menopausal symptoms, while the current study showed that in the paragraphs include the social dimension are at a high level and these results are similar, while the study of Arbab, Aqeel, Wasif & Ahmed (2018) recommended providing specialized health and psychological care services to women in menopause, which was confirmed by the current study.

The current study relied on the descriptive predictive research method to know the symptoms of menopause and its relationship to the lifestyle, while the study by Smadi (2017) relied on the semi-experimental approach to find out the effect of a counseling program to reduce anxiety and depression in menopause.

The current study is one of the few studies on women in the menopause stage in Jordan, and the symptoms accompanying this stage may not be known in the community, and this study may contribute to raising the level of awareness among women and the Jordanian society in general about the symptoms of menopause and its relationship to the lifestyle.

Recommendation:

- 1- Raising the level of community awareness about the symptoms of menopause.
- 2- Providing physical and psychological care services to women in menopause.
- 3- Increasing the level of awareness among menopausal women about a healthy lifestyle.
- 4- Conducting studies on other variables related to menopause

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