



The measure of perimenopausal health self-efficacy of Middle East women

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Abstract

Background: The perimenopausal period means the transition from reproductive to non-reproductive life. This period represents a critical life stage encompassing a range of physiological and psychosocial changes, these changes are not life-threatening, but may reduce quality of life considerably.

Objective: To evaluate the self-efficacy of Middle Eastern women in promoting health during perimenopausal period.

Methods: A descriptive and analytic (cross sectional) study, conducted at six Arabic countries includes (Iraq, Lebanon, Jordan, Yaman, Egypt, and Saudi Arabia) These countries were chosen by lottery, Non probability (purposive sample) consist of (200) women, the questionnaire was designed in a Google Form, and the questionnaire link was sent to women, which were selected according to inclusion criteria that are women in perimenopausal period, and they are attended primary healthcare centers for any consultation.

Results: the results of the study shows that 18.5% of perimenopausal women have a high level of self-efficacy, while 73.5% of them shows moderate level (Mean \pm SD= 25.61 \pm 3.468) and 8% have a low level during perimenopausal period. There is high significant difference in self-efficacy level with regard to women's marital status at p-value= .001 for separated women (M \pm SD= 30.00 \pm .000). The average age of women is 52 \pm 7 years, 49% of them seen within age group of 45 – 55 years old. 81.5% of women are married. The nationality of women distributed from various countries: Iraq (32%), Lebanon (10.5%), Jordan (12%), Yemen (11.5%), Egypt (27%), and Saudi Arabia (7%).

Conclusions: Empowering and enhancing self-efficacy can help perimenopausal women in the Middle East live long and healthy lives. Assessment and evaluation of Middle East women's needs by health care provider and encouraging them to focus on healthy nutrition, regular exercise, adequate sleep, and establishing supportive social relationships can enable them to adapt to the demands of menopause

What is already known about the topic? Overall, while there is a growing body of research, there is still a need for more targeted studies that consider the unique cultural and social contexts of Middle Eastern women in relation to perimenopausal health self-efficacy.

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Introduction

The transition from a woman's reproductive life to menopause is marked by a vital life stage known as perimenopause, which involves a range of physiological, psychological and behavioral changes, and calls for a healthy lifestyle to ensure health and functioning. Due of the declines or changes female hormones, women experience a number of psychological and well- managed the perimenopause in all nurses who interact with women and developed specialized services for the perimenopause and support services connected to various healthcare domains. (El-Said & et al.,2021) (Sus & et al.,2021)

The stage that climaxes is the shift in a woman's life from the reproductive to the non-reproductive stage, which consists of two both: before and after menopause, up to 8 years. (Afridi .,2017)(Doubova & et al.,2011) . (The final years of a woman's reproductive life are surrounded by an imprecise period of time known as the perimenopause. There are two phases involved in the transition from menopause to the perimenopause: the early transitional phase, during which cycles are primarily regular, with little disruptions, and the late transition, during which amenorrhea and endures up to the FMP for at least 60 days.(Santoro.,2016) (McCarthy &Raval ,2020). The early stage is characterized by sporadically skipped cycles. In the second stage, amenorrhea episodes can continue up to 12 months and are characterized by increased menstrual irregularity lasting more than 60 days.(Delamater & Santoro,2018; Willi & et al.,2020; Harper & et al., 2022). The perimenopause, often known as the menopausal transition, is linked to significant hormonal and reproductive changes. These changes have been thoroughly documented, along with accompanying symptoms. Menopausal symptoms are extremely common and severe enough that over 90% of

ladies should ask their healthcare professional for coping mechanisms. (Santoro.,2016) (McCarthy &Raval ,2020).

According to demographic data, 25 million women globally go through the menopause each year.(Du & et al., 2020). The average life expectancy of people has increased and the number of postmenopausal women is still rising due to societal growth and advancement. As lifespans increase, the post-menopausal and transitional periods are now the longest crucial times in every woman's existence. Women who struggle with perimenopausal syndrome now have considerably better quality of life, decreased, burdening families and society.(Harlow & paramsothy ,2011; Chen & et al., 2023; Duralde & et al .,2023).

Menopausal symptoms are experienced by the majority of women globally either during the menopause or after menopause. Vasomotor symptoms peak in the first four to seven years but can last up to 10 years, while genitourinary symptoms typically worsen over time. Even so, the Hot flashes, night sweats, insomnia, and genitourinary pain are the main symptoms; other Common signs and symptoms include mood swings, altered cognition, decreased desire for sexual activity, and bone reduction, an increase in belly fat, and unfavorable modifications to metabolic health. These indications and symptoms can occur in any sequence or combination, and the connection to menopause can even be hazy. (Harlow & paramsothy ,2011).Women employ a variety of techniques to control their symptoms, such as self-care techniques like using over-the-counter medications; complementary and alternative therapies such using herbal remedies; and exercise programs. as well as making other lifestyle changes; and using prescription medications. (Woods N. & Mitchell E.2025; whitely & et al., 2002; Baral, S., & Kaphle, H. P. 2023).

Anthropologists have demonstrated that menopause exhibits very wide differences in women's physical symptoms and attitudes depending on ethnic group, society, and social group. The 20 nations that make up the Middle East (ME) region, which stretches from the Arabian Gulf to the Atlantic Ocean, are mostly home to Arabs. Regretfully, the Arabic translation of the word menopause indicates the age of hopelessness or give up. A greater number of premenopausal women with a negative attitude have been caused by this unfavorable connotation. in the direction of menopause. But based on observations and reports from others, women's view in the post- Menopause is a unique time. In the premenopause, it's like a pendulum swinging between fear of the unknown to peace of mind following menopause.(Nirmala & et al., 2019).

Vasomotor symptoms (hot flashes, palpitations, night sweats, and sleep disturbances), genitourinary syndrome (regrouping vaginal dryness/itching, sexual complaints, and urine problems), and psychological symptoms (depression, anxiety, and insomnia) are the most common clinical manifestations of perimenopause. Anxiety and irritability) in addition to bleeding disorders such irregular menstruation. Additional expressions, such Moreover, neuromuscular symptoms are typical. Therefore, between 75% and 77% of American women reported going through perimenopause and having hot flashes and joint discomfort, respectively.(Al – Dahhan , & et al., 2008).

In the Middle East, cultural factors significantly shape perceptions of menopause. Traditional values often place a strong emphasis on family roles, motherhood, and fertility, making menopause a sensitive topic. In many communities, it is seen as a life stage that marks the end of a woman's reproductive ability, which can sometimes lead to feelings

of diminished social status, especially in societies where women's roles are closely tied to childbearing. Religious beliefs also influence views on menopause, with interpretations varying across Islamic communities. In some cases, this phase may be accepted as a natural, divinely ordained process, while in others, it can be linked with ideas of aging and loss of vitality. Furthermore, discussions about menopause are often private, with limited open dialogue due to cultural taboos surrounding women's reproductive health.(Hameed, B. H. 2018). This can lead to a lack of awareness about the medical aspects of menopause, pushing women to rely on traditional remedies rather than seeking modern medical care. However, with changing social dynamics and more access to health information, attitudes are gradually shifting, and some women are beginning to view menopause as a natural and positive transition into a new phase of life. These cultural dynamics are deeply rooted, influencing both individual experiences and societal expectations regarding menopause. A study that conducted at Saudi Arabia demonstrated that decrease a younger age at menopause, and most of Arabic women and they have deficit knowledge about menopause. (Hisham A.2014). The traditional studies reported that menstrual characteristics change during the reproductive lifespan, with the population mean menstrual cycle interval, duration decreased as women age from 20 to 40 years. Prior to menopause, population variability in menstrual cycle length increases with the transition to menopause being characterized by an increased frequency of both very long and very short cycles. (AL-Junaid & et al., 2024)

Many of physical, psychological, and social changes are linked to menopause. Researchers have demonstrated a link between low quality of life and menopause. The key factor that causes moderate or

severe menopause is hormonal changes, particularly when there is a decreased of estrogens. Signs in two-thirds of females. The symptoms of menopause are not fatal, but they could lower life quality significantly. Middle-aged women find that their diminished ability to procreate is an important problem that signifies the end of fertility and the beginning of aging.(Smail & et al., 2020). Many unpleasant symptoms, such as anxiety, depression, sexual desire , vaginal dryness, sleep problems, difficulties concentrating, and vasomotor symptoms (hot flashes and night sweats), are frequently linked to menstrual cycles. After menopause, these symptoms could last for years .(Fawzi I. & Mohsen R.2019). The term "quality of life" is broad, influenced by a person's degree of independence, psychological condition, and physical health, social relationship, as well as the surroundings. Women who are going through menopause may encounter different symptoms that are impairing their quality of life.(Ameen W & Mohsen R.2016.; Muhson W & Amir F. 2015).

Methods

Study design, setting, and participants

A descriptive and analytic (cross sectional) study, conducted at six Arabic countries includes (Iraq, Lebanon, Jordan, Yamane, Egypt, and Saudi Arabia). These countries were chosen because the three countries with high fertility rates were chosen: Egypt, Iraq, and Saudi Arabia, and the others with somewhat low fertility rates: Lebanon, Yemen, and Jordan, in addition to the difference in customs and the empowerment of women to some extent in those countries. Non probability (purposive sample) consist of (200) women, the questionnaire was designed in a Google Form, where the data was collected online, and the questionnaire link was sent to mothers in a six Arabic countries. Which were selected according to inclusion criteria that are women in

perimenopausal period, and women who attended primary healthcare centers for any consultation. The women provided informed consent and agreed to participate. This study was conducted between January 2024 and July 2024.

Survey questionnaire

The questionnaire was developed by the authors based on a literature review and related articles and consisted of two main parts: socio-demographic characteristics of women includes: (age, level of education of women, occupation of woman, nationality), the second one consists of Questions to assessment of Middle East Women's Health Promotion Self-efficacy related to Mid-life Health Changes is consist of (12) items. The questionnaire was sent to a panel of experts to assess its content validity. To assess its reliability, a validated questionnaire was distributed to 20 women. Cronbach's alpha was 0.878, indicating the questionnaire's consistent reliability.

Sampling procedure, sample size, and data collection procedure

The study sample size was calculated with a confidence interval of 85%, a population of 7 million women in perimenopausal period (defined as ages 40 to 69) in Arab region, and a 5% margin of error. The sample size was calculated as 208 using OpenEpi (Open Source Epidemiologic Statistics for Public Health). (Raosoft.,2004). A total of 208 mothers were included; however, 8 withdrew. The data of 200 participants were statistically analyzed. The inclusion criteria were women in perimenopausal period and women who visited primary healthcare centers. The researcher informed the women about their rights of voluntarily participation, withdraw at any time, confidentiality, and privacy. Women who agreed to participate were asked to electronic sign the consent form. The questionnaire was sent to a panel of experts to assess its content validity. To

assess its reliability, a validated questionnaire was distributed to 20 perimenopausal women . Cronbach's alpha was 0.768, indicating the questionnaire's consistent reliability.

Statistical analysis

For the purpose of scoring the self-efficacy scale, three Likert scale was used and scored as follows: (1) never, (2), sometimes, and (3) always. The score of self-efficacy was determined by calculating the range score for mean and determining the maximum and minimum score and rated into three levels: low= 12 – 20, moderate= 20.1 – 28, and high= 28.1 – 36.

For the purpose of analyzing data, the Statistical Package for Social Science (SPSS-version 24.0) was used through application of descriptive statistics which includes: frequencies, percentages, and mean scores which were used to describe the socio-demographic characteristics and also describe the levels of self-efficacy. Kolmogorov Simonov test was used to determine the normality of data. Kruskal-Wallis H test was used to determine the significant differences in self-efficacy with regard to women's socio-demographic variables; the significant was at probability value .001.

Ethical approval

The study protocol was approved by the Scientific Research Ethical Committee in the College of Nursing at the University of Baghdad (Ref. No. 8: January 16, 2024). In addition, permission was obtained from the Iraqi Ministry of Health/Training and Developmental Department to collect data from primary healthcare centers in six Arabic countries and the other five counties that included in this study. Ethical considerations, including the nature and aims of the study, voluntary participation, right to withdraw from participation, protection of confidentiality, privacy of the informants, use

Results

and publication of the study results, storage of data, and benefits of the study, were explained to the participants by the researcher. This information was conveyed in the human ethics form and verbally reinforced before data collection. The ethical considerations followed international standards of the declaration of Helsinki. The researcher informed the women about their rights of voluntarily participation, withdraw at any time, confidentiality, and privacy also they were informed that the data would be used for study purposes only. Women who agreed to participate were asked to electronic sign the consent form.

Discussion

the results of the study shows that women are showing moderate self-efficacy related to mid-life health changes as reported among 73.5% of them (Mean \pm SD= 25.61 \pm 3.468). Health promotion behaviors are those that include managing one's health in order to live a healthy life and that motivate people's capacity for health and improves both their physical and mental well-being, six components of regular actions that promote health, such as physical activity, health responsibility, and self-actualization, a healthy diet, human support, and stress reduction. Behaviors that promote health could be influenced by family caregivers, individual health attitudes, and physical activity, Self-efficacy, or the belief in oneself to do healthy activities, is vital in determining the making decisions on actions that promote health. Therefore, those who had a high degree of self-efficacy would favor leading a healthy lifestyle.(Chen, N., Zhang, J., & Wang, Z. 2023 ; Warner, L. M. & Schwarzer, R. 2020)

The easy of women to obtain information from the Internet, so there is non-significant

Table 1: Socio-demographic Demographic Characteristics of Women

Characteristics	No	%
Age (years) M±SD= 52 ±7	35 - 44	18.5
	45 – 54	49
	55 – 64	24
	65 ≤	8.5
	<i>Total</i>	<i>100</i>
Level of education	Primary school	7
	Intermediate school	7
	Secondary school	22
	Diploma	4
	Bachelor	33
	High Diploma	3.5
	Master	9.5
	Doctorate	14
	<i>Total</i>	<i>100</i>
Occupation	Governmental employee	53.5
	Housewife	28
	Retired	18.5
	<i>Total</i>	<i>100</i>
Marital status	Married	81.5
	Unmarried	9
	Divorced	3
	Widowed	5
	Separated	1.5
	<i>Total</i>	<i>100</i>
Nationality	Iraq	32
	Lebanon	10.5
	Jordan	12
	Yemen	11.5
	Egypt	27
	Saudi Arabia	7
	<i>Total</i>	<i>100</i>

No: Number, %: Percentage, M: Mean, SD: Standard deviation

The findings in table 1 show that average age of women is 52±7 years, 49% of them seen within age group of 45 – 55 years old. The highest percentage regarding level of education refers to bachelor degree among 33% of women followed by 22% of those who graduated from secondary schools. The occupational status refers that 53.5% of women are governmental employee and only 18.5% are retired. 81.5% of women are married. The nationality of women distributed from various countries: Iraq (32%), Lebanon (10.5%), Jordan (12%), Yemen (11.5%), Egypt (27%), and Saudi Arabia (7%).

Table 2 : Assessment of Women's Health Promotion Self-efficacy related to Mid-life Health Changes

Self-efficacy	No	%	M	SD	Assessment
Low	16	8	25.61	3.468	Moderate
Moderate	147	73.5			
High	37	18.5			
Total	200	100			

No: Number, %: Percentage

M: Mean for total score, SD: Standard Deviation for total score

Low= 12 – 20, Moderate = 20.1 – 28, High = 28.1 - 36

This table illustrates that women are showing moderate self-efficacy related to mid-life health changes as reported among 73.5% of them (Mean \pm SD= 25.61 \pm 3.468).

Table 3
Distribution of Self-efficacy Levels among Women (N=200)

Variables		Mean	SD	Significance
Age (years)	35 - 44	25.73	3.421	KWt= 18.346 P= .191 Sig: N.S
	45 – 54	25.46	3.656	
	55 – 64	26.06	2.906	
	65 \leq	24.94	4.023	
Level of education	Primary school	24.86	4.605	KWt= 15.629 P= .337 Sig: N.S
	Intermediate school	24.71	3.361	
	Secondary school	24.84	3.396	
	Diploma	24.50	3.665	
	Bachelor	26.02	3.372	
	High Diploma	26.00	1.826	
	Master	26.26	3.297	
	Doctorate	26.46	3.501	
Occupation	Employee	25.70	3.521	KWt= 11.401 P= .654 Sig: N.S
	Housewife	25.14	3.272	
	Retired	26.05	3.613	
Marital status	Married	25.67	3.470	KWt= 43.936 P= .001 Sig: H.S
	Unmarried	25.17	3.073	
	Divorced	28.00	2.191	
	Widowed	22.70	2.946	
	Separated	30.00	.000	
Nationality	Iraq	25.39	3.374	KWt= 5.580 P= .976 Sig: N.S
	Lebanon	26.19	3.250	
	Jordan	25.92	4.096	
	Yemen	25.00	4.253	
	Egypt	25.87	2.991	
	Saudi Arabia	25.21	3.725	

No: Number, %: Percentage, M: Mean, SD: Standard deviation, KWt: Kruskal-Wallis H test, P: Probability value, Sig: Significance, NS: Not significant, HS: High significant

This table indicates that there is high significant difference in self-efficacy level with regard to women's marital status at p-value= .001 for separated women (M \pm SD= 30.00 \pm .000). No significant differences have seen with remaining variables.

relationship between the education as well as all age groups. Therefore, married women have a lot of responsibilities she does not put herself as a priority, instead of a separated or divorced woman. Most of climacteric stage women's interventions have been on educating and enlightening women on how to avoid specific diseases. Several research have created educational plans to increase diet and physical activity in menopausal women as well as prevent osteoporosis. Women, proving that both moderate and intense physical activity are feasible and helpful, which enhances bone density, blood pressure, muscle strength, and overall health-related quality of life (HR-QoL). Additional research has looked at the effects of stress and knowledge about healthy habits. Supervision and potential therapies throughout the climacteric phase; these investigations have revealed the beneficial impact of educational groups on participants' knowledge, when compared to a control group, is demonstrated by enhanced healthy habits, greater sexual attraction, and reported ease in adjusting to the changes of this stage. Similar to the general population, climacteric women benefit from interventions that use cognitive behavioral techniques, like group and individual therapy, to support lifestyle modifications are more beneficial for vasomotor symptoms, psychological discomfort, and self-effectiveness, contentment with treatment, and cardiovascular risk variables in contrast to written or spoken details.(El-Said., 2021). Concerning the relationship between exercise that is sustained and how it affects women's life satisfaction and self-efficacy in both the premenopausal and postmenopausal stages. On a sample of 422 women, 215 of whom were premenopausal and 207 of whom were postmenopausal, a relational screening model was used. Individuals, by means of convenient sampling. The frequency and length of the participants' exercise was

regarded with consideration.(Kulak & et al.,2023). Midlife is also the time when women realize how important it is to start living a better lifestyle and working out frequently in order to prevent and control health problems later in life. Many Middle Eastern women do not frequently exercise for a variety of reasons, including shyness, and among these is a dread of society. Furthermore, women's sports culture is still in its beginning. Many women may encounter rejection from their husbands when they want to work out and gym.(Dias & et al.,2021). According to other research, 82% of perimenopausal women experience amenorrhea, a protracted menstrual cycle, and oligomenorrhea. Of these, 18% experience symptoms such as menostaxis, short menstrual cycles, or increased monthly blood volumes. It was shown that 19% of the individuals exhibited carcinogenic alterations, such as histological precancerous lesions, in their brief menstrual cycles. Additionally, the main cause of irregular uterine bleeding during the perimenopause is an ovulatory dysfunction, which frequently appeared as menopausal symptoms for weeks or months, then as an abrupt, severe vaginal hemorrhage with irregular menstrual flow, more serious side effects include anemia, infection, and shock. It's widely acknowledged that hormone replacement treatment is essential for enhancing women's menopause-associated symptoms and is the best course of action in medicine. Hormone dose, duration, and regimens are currently hot issues of discussion because research is continually being done on treating menopausal symptoms in various patients.¹² Additionally, researchers have documented a wide range of Many distressing occurrences, such as illness, bereavement, family troubles, workplace difficulties, financial concerns, and dissatisfied goal achievement; yet, none have specified which life events for women, midlife is the most salient period.

(Thomas & et al.,2018)

One behavioral modality that may assist improve certain good aspects of mental health, such as self-esteem, and lessen the negative symptoms of menopause is physical activity (PA). Menopausal women may be more vulnerable to poor outcomes due to lower self-esteem. results of menopause and lead to a menopausal experience that is more uncomfortable and stressful. Among the mean age of the 111 women was 51.7 ± 4.7 . The most serious symptoms among the women in the study included irritability (1.58 ± 1.37), joint and muscle discomfort (1.56), and sexual issues (1.71 ± 1.5). Self-esteem was higher in women with higher overall PA levels ($p = 0.001$). In conclusion, the outcomes of this study demonstrated a relationship between physical activity levels and self-esteem.(Galas & et al.,2021).

Approximately 85% of women have at least one symptom during the menopausal transition, such as hot flashes, depression, or disturbed sleep, which causes roughly 10% of them to seek medical consultation. Nowadays, following the Women's Health Initiative Study (WHI), symptom management has emerged as more intricate as a result of knowledge about the dangers of hormone therapy (HT). Communication during the perimenopause, health providers give women the chance to think about strategies for the purpose of promoting good aging as well as symptom control. The lack of information regarding women's experiences with symptoms and their attempts to control them throughout the perimenopause, yet, restricts health professionals' knowledge of the common experiences of persons residing in communities. Furthermore, statistics regarding the interpretations women make of their experiences are not available to physicians.(Woods N. & Mitchell E.2025).

There is a risk that mood and cognitive abnormalities will occur throughout the menopause transition. Menopausal women transition symptoms are associated with a higher chance of acquiring anxiety, depression, and sleep-related issues. Consequently, women going through a symptomatic menopausal transition ought to be closely watched in order to implement treatments as soon as possible.(Lee & et al.,2023; Bromberger, J. T., & Kravitz, H. M. 2011).Women in their middle years encounter symptoms of menopause, including mood swings, memory loss, hot flashes, and disturbed sleep problems as well as dry vagina). Women going through menopause sometimes complain about neurological symptoms like sleep disturbance, "brain fog," and mood swings, which have a big influence on their physical and mental well-being as well as their quality of life. (Gava & et al.,2019) .Engaging in physical activity and utilizing goods flavones and phytoestrogens, as well as taking part in counseling and educational activities, have an efficient part in enhancing menopausal women's quality of life. (Taebi M. & et al.,2018).The way of life that interventions as an alternative form of treatment are economical, free from side effects, and government program might be put into place to benefit menopausal women. (Beura, S., Patnaik, L., & Sahu, M. 2023; Rathnayake & et al.,2019).

Conclusion

Empowering and enhancing self-efficacy can help perimenopausal women in the Middle East live long and healthy lives. Assessment and evaluation of Middle East women's needs by health care provider and encouraging them to focus on healthy nutrition, regular exercise, adequate sleep, and establishing supportive social relationships can enable them to adapt to the demands of menopause

Limitations of the study

This study, relied only on self-reports and information provided by the women, and the topic is sensitive to many women, this may have influenced the results of the study, in addition to the fact that the study included only 6 Arab countries and not all Arab countries.

Declarations

The ethical approval was obtained from the Institutional Review Board (IRB) in College of Nursing at University of Baghdad with a reference number 8 in 16 January, 2024.

All participants provided informed consent to participate in the study.

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Data availability statement

There is no research related data stored in publicly available repositories, and the data will be made available on request from the corresponding author.

Authorship contribution statement

Hawraa Hussein Ghafel: Writing – original draft, Supervision, Resources, Project administration, Investigation, Funding acquisition, Data curation, Conceptualization.

Declaration of competing interest

The author declare that they have no known competing financial interests or personal relationships that could have appeared to influence the work reported in this paper.

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