Assessment of the physiological changes and health behaviors among middle age women

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Abstract:

Objectives:-A descriptive study was carried out to assess the physiological changes and health behaviors of middle age women

Material and Methods:-A purposive samples of (١٠٠) married women with age group between (٤٥ – ٦٥) years , data were collected through personal interview by using questionnaire form constructed for the purpose of the study

Results:-The results of the study showed that the highest percentage ٣٥٪ of the study sample was at age (٥٥ – ٥٩) years , ٢٥٪ of them intermediate graduate , more than half of them were house wives , with high gravidity and parity , ٨١٪ of them on previous history for abortion , ٦٧٪ of them their menstrual cycle cessation and ٢٤٪ of them their menstrual cycle was irregular .The majority of study sample suffered from menopausal symptoms, and the most symptoms were (irritability , urinary and sexual problems , joint and muscular discomfort , anxiety , physical and mental exhaustion , hot flushes and sweating , depressive mood and heart discomfort).

The results also showed that the health behaviors regarding nutrition items were acceptable in all items except the items related to calories , CHO and sweats and eating foods contain calcium and avoid eating foods with spices , also the results reveals that the high percentage ٤٥٪ of the sample using medication to relive menopausal symptoms and high percentage of them didn't do any periodic investigation for breast , uterus , eyes and level of cholesterol and sugar , the high percentage ٤٠٪ of them were cheeked their weight and do diet but not always , ٦٥٪ of them not doing exercise or any physical activity and majority of them not smoking.

Recommendation:-The study recommended, the importance of health awareness through educational program and mass media regarding the physiological and psychological changes and health behaviors to prevent future complications

Key Words ;physiological ,health behaviors ,middle age ,women

Introduction

Modern medicine has significantly prolonged human lifespan[1] .All women who live enough will make transition to menopause [2].

Menopause which is defined as complete cessation of menstruation for twelve months or more is a normal physiological change experienced by middle age women. Some of menopausal symptoms experienced by these women can be severe enough to affect their normal lifestyle or daily activities [3,4].

Un fortunately majority of these women are not aware of the changes brought about by menopause[5].The common climacteric symptoms experienced by them can be group into: vasomotor, physical, psychological or sexual complaints [6].

These symptoms are directly resulted from depletion of estrogen level as women approaches menopausal stage and some of these women experience these menopausal symptoms early in the premenopausal phase[7].

It was also noted in some postmenopausal women with long term estrogen deficiency changes to the cardiovascular or bone which leads to osteoporosis has been established[8].

Menopausal symptoms experienced by women affect their quality of life. In Western countries, menopausal symptoms such as hot flashes, sweating and vaginal dryness are considered as the main diametric complaints[4]. In other cultures these symptoms dramatically vary from those observed in Western women, while North American and European samples were reported higher rates of symptoms than that of Asian women[5,9].

Objectives of the study:-This study aimed to :-

١-Assess the menopausal symptoms among middle age women.

٢- Assess the health behaviors of middle age women.

Materials and Methods:-

Across –sectional study conducted from the month of March ٢٠١٦ to April ٢٠١٦, to assess the menopausal symptoms and health behaviors of middle age women.

A purposive sample of (١٠٠) married women with age group between (٤٥-٦٥)years who visited the MCHC at Bab-Al-madam, data were collected through personal interview by using questionnaire form constructed for the purpose of the study which included three sections, socio-demographic and reproductive data, menopausal symptoms by using

Menopause Rating Scale is composed of [10] items[2] ,and health behaviors data related to nutritional aspects, medication usage, exercise, and periodic investigations were rated and scored to three points as three for always, two for sometimes, one for never, so the cutoff point was:-

cutoff point=٣+٢+١\٣=٢

For measuring weight of the study sample used the body mass index according to WHO categories [11].Data analysis of the study was done by using descriptive statistical methods

Results :- Table ١\Distribution of the study sample according to socio-demographic characteristics.

Variables	F.	%
Age Group		
٤٥_٤٩	١٤	١٤
٥٠_٥٤	٢٤	٢٤
٥٥_٥٩	٣٥	٣٥
٦٠_٦٤	١٤	١٤
٦٥ & above	١٣	١٣
Mean ± SD ٥٦,٤ ± ١,٦		
Social Status		
Married	٥٣	٥٣
Divorced	١٢	١٢
Widow	٢٠	٢٠
Separated	١٥	١٥
Educational Status		
Illiterate	١٧	١٧
Read and write	١٤	١٤
Primary school graduate	١١	١١
Intermediate school graduate	٢٥	٢٥
Secondary school graduate	١٦	١٦
University graduate	١٧	١٧
Occupation		
Worker	٤٤	٤٤
House wife	٥٦	٥٦
Total	١٠٠	١٠٠٪

Table (١) Shows that the highest percentage (٣٥٪) of women at age group (٥٥_٥٩) years, while the lowest percentage (١٣٪) of them their age was ٦٥ years and above and the mean with SD of age was ٥٦,٤± ١,٦ years.

Regarding social status more than half of study sample were married, while the lowest percentage (١٢٪) of them divorce.

Concerning the educational level for women ٢٥٪ of them graduated from intermediate school and (١١٪) of them graduated from primary school, and more than half of them were house wife.

Table٢\ Distribution of the study sample according to reproductive characteristics.

Variables	F.	%
Gravidity		
٠	٩	٩
١	١٤	١٤
٢	٢٤	٢٤
٣& more	٤٩	٤٩
Parity		
٠	١٩	١٩
١	١٠	١٠
٢	٢٦	٢٦
٣& more	٤٥	٤٥
Number of abortion		
٠	٨١	٨١
١	١٣	١٣
٢& more	٦	٦
Menstrual cycle		
Regular	٩	٩
Irregular	٢٤	٢٤
Disappear	٦٧	٦٧
Total	١٠٠	١٠٠٪

Table (٢) Shows that the highest percentage (٤٩٪) of study sample had three and more pregnancies, while (٩٪) of them had no pregnancy.

Regarding the parity the highest percentage (٤٥٪) of study sample had three and more deliveries, while (١٠٪) of them had one delivery.

Concerning the number of abortion (٨١٪) of the study sample had no history of abortion, while (٦٪) of them had two and more abortion.

Regarding the menstrual cycle the highest percentage (٦٧٪) of the study sample their menstrual period was disappear.

Table٣\ Distribution of the study sample according to Body Mass Index.

Body Mass Index	F.	%
Normal weight ١٨-٢٤ kg	٢٦	٢٦
Over weight ٢٥-٢٩ kg	٥٧	٥٧

Obesity≥ ٣٠ kg	١٧	١٧
Total	١٠٠	١٠٠٪

Table (٣) Shows that more than half of the study sample (٥٧٪) were overweight, while (١٧٪) of them were obese.

Table ٤\ Frequency of menopausal symptoms among the study sample.

Menopausal symptoms	F.	%
١-Joint and muscular discomfort.	٧٥	٧٥
٢- Anxiety.	٧٧	٧٧
٣- Depressive mood.	٦٨	٦٨
٤- Bladder problems.	٧٨	٧٨
٥- Sexual problems.	٧٨	٧٨
٦- Sleeping problems.	٦٨	٦٨
٧- Heart discomfort	٦٥	٦٥
٨- Hot flushes, sweating.	٧٤	٧٤
٩- Physical and mental exhaustion.	٧٦	٧٦
١٠- Irritability.	٨٠	٨٠
١١- Dryness of vagina.	٧٨	٧٨

Table (٤) shows the detail frequency of menopausal symptoms, the most common menopausal symptoms for the study sample were feeling irritability (٨٠٪), bladder problems (٧٨٪), feeling anxiety (٧٧٪), physical and mental exhaustion (٧٦٪), joint discomfort and sexual problems (٧٥٪) , hot flashes, sweating(٧٤٪),depressive mood and sleeping problems (٦٨٪) and heart problems (٦٥٪).

Table ٥ \ Distribution of study sample according to nutritional behaviors.

Nutritional behaviors	Always		Sometimes		Never		Total	Mean score
	F.	%	F.	%	F.	%		
Eat animal protein \fish	٤٥	٤٥	٣٦	٣٦	١٩	١٩	١٠٠	٢,٢٦
Eat animal protein\chicken without skin.	٣٥	٣٥	٤٥	٤٥	٢٠	٢٠	١٠٠	١,٨
Eat lean cuts of meat.	٤٩	٤٩	٣٨	٣٨	١٣	١٣	١٠٠	٢,٣٦
Eat vegetable protein\beans	٤٤	٤٤	٣٧	٣٧	١٩	١٩	١٠٠	٢,٢٥
Eat adequate amount of fresh vegetable and fruits.	٥٦	٥٦	٣١	٣١	١٣	١٣	١٠٠	٢,٤٣
Eat food that contain refined (rise, potatoes & macaroni).	٤٥	٤٥	٤٠	٤٠	١٥	١٥	١٠٠	٢,٣
Eat presweetened food (chocolate,cake).	٤٤	٤٤	٤٠	٤٠	١٦	١٦	١٠٠	٢,٢٨
Eat dairy products.	٢٦	٢٦	٣٣	٣٣	٤١	٤١	١٠٠	١,٨٥
Eat food with low fat & cholesterol.	٣٤	٣٤	٤٠	٤٠	٢٦	٢٦	١٠٠	٢,٠٨
Eat food contain fiber(nuts& cucumber).	٤٢	٤٢	٤١	٤١	١٧	١٧	١٠٠	٢,٢٥

Drinking adequate of fluids(٦-٨ glasses) daily.	٣٤	٣٤	٤٧	٤٧	١٩	١٩	١٠٠	٢,١٥
Avoid fast meals.	٣٢	٣٢	٤١	٤١	٢٧	٢٧	١٠٠	٢,٠٥
Avoid eating spicy food.	٢١	٢١	٣٢	٣٢	٣٨	٣٨	١٠٠	١,٦٥

Table(٥) Shows that the highest mean of score (٢,٤٣) of the nutritional behaviors was in item No.٥ refers to eat adequate of fresh vegetable and fruits, while the lowest mean of score(١,٦٥) was in item No.١٣ refers to avoid eating spicy food.

Table ٦\ Distribution of the study sample according to health behaviors.

Items	Always		Sometime		Never		Total	Mean score
	F.	%	F.	%	F.	%		
Use drugs to reduce their symptoms.	٤٥	٤٥	٣٢	٣٢	٢٣	٢٣	١٠٠	٢,٢٢
Use prescription drugs under medical supervision.	٤٦	٤٦	٣٠	٣٠	٢٤	٢٤	١٠٠	٢,٢٢
Get regular and periodic laboratory test for:- Eyes	٢٧	٢٧	٣٣	٣٣	٤٠	٤٠	١٠٠	١,٨٧
Uterus	٢٣	٢٣	٣٢	٣٢	٤٥	٤٥	١٠٠	١,٨٧
Breast	١١	١١	٢٥	٢٥	٦٤	٦٤	١٠٠	١,٤٧
Blood sugar	٢٨	٢٨	٣٣	٣٣	٣٩	٣٩	١٠٠	١,٨٩
Level of cholesterol	٢٨	٢٨	٢٧	٢٧	٤٥	٤٥	١٠٠	١,٨٣
Weight is within normal limit	٤٠	٤٠	٣٦	٣٦	٢٤	٢٤	١٠٠	٢,١٦
Do diet for reduce weight.	٣٥	٣٥	٣٨	٣٨	٢٧	٢٧	١٠٠	٢,٠٨
Exposure to sun light.	٢٤	٢٤	٢٧	٢٧	٤٩	٤٩	١٠٠	١,٧٥
Do exercise.	١٤	١٤	٢١	٢١	٦٥	٦٥	١٠٠	١,٤٩
Smoking	٢١	٢١	١٨	١٨	٦١	٦١	١٠٠	١,٦

Table(٦) shows that the all items for health behaviors related to drugs usage and weight were above the cutoff point ,while the items related to periodic investigation, exposure to sunlight, exercise and smoking were less than the cutoff point.

Discussion:-

The study results show that the mean age at menopause was ٥٦,٤±١,٦ years as shown in table(١).This is slightly higher than studies done in Bangladesh(٥١,١years) and Singapore(٤٩,١ years) Thailand (٤٨,٧years) [٣,١٢],and other studies reported that the disruption of the menstrual cycle depends on the genetic factor in the family ranging age ٤٥ to ٥٥ and there are some women happen to them early break at the age of ٣٦ years[١٢,١٣].

In addition about ٦٧٪ of the study sample their menstrual period disappeared and ٢٤٪ of them was irregular as shown in table (٢)the results of this study agree with (Karen,٢٠١٣) who stated that the menstrual period becomes less regular and eventually stops completely[١٣,١٤],while other studies reported that during early menopause transition the menstrual cycle remain regular but the interval between cycles begins to lengthen, hormone levels begin to fluctuate ,ovulation may not occur with each cycle[١٣,١٤].

The results also show that more than half of the study sample were over weight as shown in table (٣),Pamela,٢٠١٦, stated that many women are at risk for greater weight gain during the perimenopause and this excess fat usually is deposited deep inside the tummy ,under the abdominal muscle wall[١٤], from our study as shown in table(٤)irritability, bladder problem ,dryness of vagina and anxiety were experienced most by the study sample, these findings were also noted to be corresponding to studies conducted in Asian and Caucasian[٣,١٢].

Also joint and muscular discomfort, physical and mental exhaustion ,and sleeping problems were experienced most of the women. Hot flushes, sweating were noted to be higher than the half of the study sample when compared to findings from studies done on Western women who were reported to be ٤٥٪ [٣,١٢].

Study results show that the most of the nutritional behaviors items were higher than cutoff point as shown in table(٥),previous studies stated that ,improved diet can be a great natural menopause treatment, studies have shown that diets rich in foods that promote estrogen levels such as (soy,apple ,alfalfa,cherries,potatoes,rice,wheat and yams)are great menopause treatments[١٥,١٦].Other studies(Bolanos,٢٠١٠) reported ,that there is no evidence of consistent benefit of alternative therapies for menopausal symptoms despite popularity. The effect of soy isoflavones on menopausal symptoms is promising but not clear[١٦,١٧]. Also there is no support for herbal or dietary supplements in the prevention or treatment of the mental changes that occur around menopause [١٧,١٨].

Some studies reported about life style measures such as avoiding hot drinks, spicy foods may partially supplement the use of medications for some women[١٦,١٧].

Regarding the health behaviors ,the results show that the all items related to drugs usage and weight were above the cutoff point as shown in table(٦),previous studies reported that hormone replacement therapy may be reasonable for the treatment of menopausal symptoms such as hot flushes[١٦,١٧].

Some research's reported that proving HRT help the growth of existing tumors do not appear at diagnosis ,and periodic examination every six months to the uterus and breast ultrasound examination and laboratory tests such as cervical scan to avoid the appearance of tumors and ensure safety [١٦,١٧].

The level of cholesterol in the blood varies with age decreases the level of HDL, and rises the level of LDL and with regular activity and nutrition smart it helps to reduce LDL and raise the rate of HDL ,and also with advancing age may rise in blood sugar levels for several reasons, including the fact that the cells no longer produce insulin at the same rate ,which was produced before. We must treat it next to physical activity to maintain a healthy weight ,which helps make the sugar levels within the normal scope[١٢,١٣].

In addition to the other items related to periodic investigation ,exposure to sunlight ,exercise and smoking were less than the cutoff point .Studies stated that, physical activity has been scientifically proven to increase body confidence and sense of pleasure in life .It is also the key predictor of healthy weight maintenance[١٤,١٥].

Other studies also reported that ,life style changes may reduce both some symptoms and decrease health risks associated with menopause such as smoking cessation, adequate vitamin D intake, regular weight bearing exercise and intake of bisphosphate drug alendronate may decrease the risk of a fracture [١٥,١٨].

Conclusions:- The majority of study sample suffered from menopausal symptoms and their health behaviors regarding nutritional aspects and using drugs to reduce their symptoms were acceptable ,while other health behaviors related to periodic investigations were unacceptable.

Recommendation:-The study recommended, the importance of health awareness through educational program and mass media regarding the physiological and psychological changes and health behaviors to prevent future complications.

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الخلاصة :-

اهداف الدراسة :- تم أجراء دراسة وصفية للنساء في عمر ما بعد الانجاب لتقييم التغيرات الفسيولوجية والسلوكيات الصحية للنساء .

منهجية الدراسة :- تم اختيار عينة عمدية لمئة (١٠٠) من النساء المتزوجات ضمن الفئة العمرية (٤٥-٦٥) سنة وتم استجوابهم بالمقابلة الشخصية على الاستمارة الاستبيان المعدة لأغراض الدراسة .

النتائج :- تشير النتائج الى ان اعلى نسبة ٣٥% من العينة هم ضمن الفئة العمرية (٥٥-٥٩) سنة وأعلى نسبة ٢٥% منهن خريجات المتوسطة و٥٦% منهن ربات بيوت ٤٩% منهن لديهن حمل ثلاث مرات واكثر و٤٥% منهن انجبن ثلاث مرات وأكثر وأغلبية عينة الدراسة ٨١% منهن ليست لديهن تاريخ سابق للإجهاض و٦٧% منهن هم في فترة انقطاع الدورة الشهرية و٢٤% منهن دورتهم الشهرية غير منتظمة .

وأظهرت النتائج بان أغلبية عينة الدراسة كانوا يعانون من أعراض ما قبل وما بعد انقطاع الطمث وكانت الاعراض الاكثر انتشاراً هي (التهيج العصبي , مشاكل الجهاز البولي والمهبل , الآم المفاصل والعضلات , والشعور بالقلق والارهاق البدني والعقلي , والشعور بالسخونة وزيادة التعرق الاكتئاب واضطرابات النوم وزيادة ضربات القلب .

ودلت السلوكيات الصيحة التي تخص التغذية بانها مقبولة في جميع الفقرات عدا بعض منها التي تخص تناول النشويات والحلويات والاطعمة الحاوية على الكالسيوم وتجنب تناول الاطعمة الغنية بالتوابل واشارت النتائج ايضاً الى ان اعلى نسبة ٤٥% من النساء يستخدمن ادوية لتخفيف معانتهم من الاعراض .واشارت اعلى النسب الى عدم اجراء اية فحوصات دورية للثدي , للرحم , للعين , ولمستوى الكولسترول والسكر في الدم , وأعلى نسبة ٤٠% منهن يقومون بشكل غير مستمر بمراقبة اوزانهم وتخفيفها وأعلى نسبة ٦٥% منهن لا يمارسن الرياضة او اية نشاطات بدنية وأغلبهم لا يدخنون.

التوصيات   :- بناءاً على نتائج الدراسة نوصي بالتوعية الصحية والثقافية والاجتماعية عن طريق بناء برنامج ووسائل الاعلام حول التغيرات الفسيولوجية للنساء في عمر ما بعد الانجاب والسلوكيات الصحية الضرورية للوقاية من المضاعفات المستقبلية