# ASSESSMENT OF NATURAL CLIMACTERIC COMPLAINTS AMONG MIDDLE AGE IRAQI WOMEN IN BAGHDAD CITY+

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## Abstract

**Retrospective, descriptive study aimed to assess the natural climacteric complaints among 410 women aged 40-60 years who were selected in a systematic random from 50 clusters in Baghdad city during the period from 1st of September 2000 to the 31st of July 2001.To meet the objectives of the study an instrument was constructed, which consisted of an interview format, for (demographic data) and climacteric complaints scale (30 complaints).The study sample was categorized to three groups according to their menstrual status (pre, peri, and post-menopause).The results were analyzed through the use of descriptive and inferential statistics and at the level of significant less than 0.05.After data analysisd, the following findings reveal:High percentages of hot flushes and night sweats were found among peri and post-menopause women.**

- **Most of psychosomatic complaints (13 complaints) were reported by more than half of both peri and post-menopause women.**
- **High percentages of some general complaints were found among peri and post-menopause women.**
- **Climacteric complaints were found significantly higher among peri and post-menapause women than pre-menopause women.**

**In the light of the study results, the researcher recommend:**

1- **establishing menopausal counseling clinics within primary health care centers, providing screening, treatment and preventive services.**
2- **health education and instructions concerning women health should be offered via the educational media.**
3- **further studies concerning climacteric and women health should be conducted.**

## المستخلص

**دراسة وصفية ارتجاعية تهدف الى تحديد الاعراض المرافقة لمرحلة اليأس الطبيعي وشملت العينة ٤١٠ امراة تراوحت اعمارهن ما بين ٤٠-٦٠ سنة، تم اختيارهن بالطريقة العشوائية المنتظمة من ٥٠ تجمعاً سكانياً في مدينة بغداد للفترة من ١ ايلول/٢٠٠٠ الى ٣١ تموز/٢٠٠١. لغرض تحقيق اهداف البحث صممت اداة تضمنت استمارة المقابلة (المعلومات الديمغرافية) ومقياس شكاوى اليأس (٣٠ شكوى).كما تم تصنيف عينة الدراسة الى ثلاث مجاميع حسب حالة الطمث لهن (قبل، ما حول، بعد اليأس) تم تحليل النتائج باستخدام الاحصاء الوصفي والاحصاء الاستنتاجي وبمستوى دلالة اقل من ٠,٠٥. وبعد تحليل البيانات أظهرت النتائج كما يلي:**

- **حدوث الفورات الحارة والتعرق الليلي بنسبة مئوية عالية عند النساء حول اليأس وبعده.**
- **حدوث شكاوى نفسية جسمية (١٣ شكوى) عند اكثر من نصف النساء حول اليأس وبعده.**
- **حدوث بعض الاعراض الجسمية وبنسبة مئوية عالية عند النساء حول اليأس وبعده.**
- **حدوث شكاوى الاياس وبدلالة احصائية أكثر عند النساء ما حول وبعد اليأس عن النساء قبل اليأس.**

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**وعلى ضوء النتائج توصي الباحثة بـــ:**

- **انشاء عيادات استشارية للنساء في مرحلة الاياس ضمن مراكز الرعاية الصحية الاولية، تقدم الخدمات العلاجية والوقائية.**
- **التوعية الصحية وتقديم النصائح والارشادات في مجال صحة المراة من خلال وسائل الاعلام.**
- **اجراء دراسات وبحوث اكثر في مجال الاياس وصحة المراة.**

## Introduction

Climacteric is the period of transition from the reproductive phase of life to the old age (senium)[1]. It refers to the host of physical and psychological alternations that occur around the time of menopause, several years before when the endocrine and other changes begin and several years after when menopausal symptoms are most acute [2]. So climacteric and menopause are natural events that are not without risks and major consequences to women's health[3]

Currently, with environmental improvement, the women live longer than before (average of 30 years) beyond menopause, it means the life expectancy has lengthened to approximately 80 years[2,4] .The increase in life expectancy has brought with it rising numbers of severe health problems, some of which are directly or secondarily caused by natural decrease of sex hormones[5].

In order to accomplish the goal of extended life with good function, medicine must make great strides in the area of planning and prevention, in addition to adopting a healthy life style[6].

Women's health status in particular has an important impact on the health of their children, the family, the community, and the environment. Therefore, the health of women is a prerequisite for the health of the whole family, community, and society[7].

On the other hand, climacteric and menopause is a stressful event in the women's life. They may need assistance in the form of counseling to adjust successfully to this developmental phase of life. The nurses and other health care givers can help the menopausal women to achieve high level function as well as support women's view and feeling of self worth and self esteem[8]. Therefore, the nurses and health care givers need to have a broad knowledge of climacteric issue and the impact of this physiological process and its associated stressors for the women and to promote their adaptation and well-being [9].

## Objectives

1- To find out women's ages at natural cilmacteric (pre-menopause, peri-menopause, and menopause and post-menopause).
2- To identify complaints and symptoms that are associated with natural climacteric among the women.
3- To find out the relationship between different climacteric complaints according to menstrual status for the women.

## Material and Method

A retrospective and descriptive study was conducted, the target population was 500 healthy women aged 40-60 years selected in a systematic random from 50 clusters in Baghdad

City. Out of 500, only 410 women were enrolled in this study because they met the following inclusion criteria: -

1- Healthy women aged 40-60 years.
2- Women had no hysterectomy or bilateral opherectomy.
3- Women had no chronic disease (e.g. heart disease, hypertension, diabetes mellitus, asthma and thyroid disease).
4- Women had no malignancy, radiation and chemotherpy.
5- Women had no hormonal or steroid treatment.
6- Women had no amenorrhea or menopause before age 40 years.
7- Women had no evidence of uterine fibroid or other gynecological problem.
8- Women had no psychological or mental diseases.

Data collection was based on interview technique of each woman at her home and using interview format during the period from 1st of September/2000 to the 31st of July/2001.

The instrument of the study was designed and constructed after extensive review of related literature and previous studies which inlcude: -

**1-** Demographic data: Age, educational level, employment, and marital status.
Menstural cycle status.
Reasons for seeking medical care.
Knowledge of the study group regarding climacteric.

2- Climacteric complaints scale: for the purpose of the study, the investigator adopted only 30 complaints that are culturally accepted and more suitable to our women in the midlife. These complaints were divided into the following categories: -

1- Characteristic climacteric complaints (6 items).
2- Psychosomatic complaints (16 items).
3- General somatic complaints (8 items).

Each complaint was rated as: No, Absent, Yes = present either currently or previously. The score for each complaint if it was experienced is one. Total score is 30.

The validity and reliability of the instrument was secured through the following: -

1- Pilot study: it carried on 20 women selected randomly, their ages was 40-60 years.
2- Reviewed by panel of experts (27 experts) from different fields.
3- Test and retest approach (r = 0.92).
4- Cronbach's coefficient alpha equation (0.93).

The study sample had been categorized by menstrual status to three groups and as defined by Henry[1], WHO[2], Jaszmann[10]:

- Pre-menopause: women who still menstruated regularly.
- Peri-menopause: women whose menstruction were progressively more irregular but they had at least one menstrual period in the last 12 months.
- - Menopause: women had no menstrual period in the last 12 months.

- Post-menopause: women in last phase of the transitional period. It starts at menopause and ends when the senium begins at age 65.

Data were analyzed through descriptive and inferential statistic approaches. The level of significance was is than 0.05.

## ***Results***

Table (1): **The age distribution of (410) women according to menstrual status**

| **Age (years)** | **Pre.** | | **Peri** | | **Post** | | **Age at NM*** | |
|---|---|---|---|---|---|---|---|---|
| | **No.** | **%** | **No.** | **%** | **No.** | **%** | **No.** | **%** |
| 40 | 8 | 5.2 | 2 | 2.1 | - | - | - | - |
| **41** | 15 | 9.7 | - | - | - | - | **1** | **0.6** |
| 42 | 15 | 9.7 | 5 | 5.3 | - | - | 5 | 3.1 |
| 43 | 19 | 12.3 | 4 | 4.3 | - | - | 2 | 1.2 |
| 44 | 21 | 13.5 | 5 | 5.3 | - | - | 5 | 3.1 |
| 45 | 18 | 11.6 | 4 | 4.3 | 2 | 1.2 | 5 | 3.1 |
| 46 | 19 | 12.3 | 6 | 6.4 | 2 | 1.2 | 12 | 7.5 |
| 47 | 13 | 8.4 | 11 | 11.7 | 2 | 1.2 | 14 | 8.7 |
| 48 | 6 | 3.9 | 12 | 12.8 | 3 | 1.9 | 15 | 9.3 |
| 49 | 6 | 3.9 | 4 | 4.3 | 3 | 1.9 | 17 | 10.6 |
| 50 | 7 | 4.5 | 9 | 9.6 | 8 | 5.0 | 19 | 11.8 |
| **51** | 2 | 1.3 | 11 | 11.7 | 15 | 9.3 | **30** | **18.6** |
| 52 | 3 | 1.9 | 7 | 7.4 | 17 | 10.6 | 11 | 6.8 |
| 53 | - | - | 2 | 2.1 | 15 | 9.3 | 11 | 6.8 |
| 54 | 2 | 1.3 | 6 | 6.4 | 16 | 9.9 | 6 | 3.7 |
| 55 | - | - | 1 | 1.1 | 13 | 8.1 | 6 | 3.7 |
| 56 | - | - | 4 | 4.3 | 14 | 8.7 | 1 | 0.6 |
| **57** | **1** | **0.6** | 1 | 1.1 | 12 | 7.5 | - | - |
| 58 | - | - | - | - | 10 | 6.2 | **1** | **0.6** |
| 59 | - | - | - | - | 6 | 3.7 | - | - |
| 60 | - | - | - | - | 23 | 14.3 | - | - |
| **Total** | **155** | **37.8** | **94** | **22.9** | **161** | **39.3** | **161** | **39.3** |
| **Mean ± SD** | **44.9 ± 3.2** | | **48.6 ± 3.9** | | **54.5 ± 3.7** | | **49.4 ± 3.2** | |

* NM : Natural Menopause

The distribution of 410 study group according to the age and menstrual status shown in table (1): 155(37.8%) women are pre- menopause with a mean age of (44.9±3.2 years), 49(22.9%) women are peri- menopause with a mean age of (48.6±3.9 years), while the highest percent 161 (39.3%) are postmenopaus women with a mean age of (54.5±3.7 years). Among the 161 postmenopause women, the age range for experiencing natural menopause is (41 - 58) years, with a mean age of (49.4±3.2 years).

**Table (2)** Demographic characteristics of the study group

| | **Pre** | | **Peri.** | | **Post** | | **Total** | |
|---|---|---|---|---|---|---|---|---|
| | **No.** | **%** | **No.** | **%** | **No.** | **%** | **No.** | **%** |
| Educational Level | | | | | | | | |
| £ primary school graduate | 58 | 37.4 | 55 | 58.5 | 104 | 64.6 | **217** | **52.9** |
| Secondary school graduate | 41 | 26.5 | 23 | 24.5 | 24 | 14.9 | 88 | 21.5 |
| Institute graduate | 56 | 36.1 | 16 | 17.0 | 33 | 20.5 | 105 | 25.6 |
| *Total* | 155 | 100 | 94 | 100 | 161 | 100 | 410 | 100 |
| *Employment* | | | | | | | | |
| Currently employed | 58 | 37.4 | 27 | 28.8 | 50 | 31.1 | 135 | 32.9 |
| *Not employed* | 97 | 62.6 | 67 | 71.3 | 111 | 68.9 | **275** | **67.1** |
| *Total* | 155 | 100 | 94 | 100 | 161 | 100 | 410 | 100 |
| *Marital status* | | | | | | | | |
| Single | 13 | 8.4 | 8 | 8.5 | 18 | 11.1 | 39 | 9.5 |
| *Married* | 123 | 79.4 | 72 | 76.6 | 98 | 60.9 | **293** | **71.5** |
| Widowed | 14 | 9.0 | 14 | 14.9 | 37 | 23.0 | 65 | 15.9 |
| Divorced | 5 | 3.2 | - | - | 8 | 5.0 | 13 | 3.1 |
| *Total* | 155 | 100 | 94 | 100 | 161 | 100 | 410 | 100 |

Table (2) represents the demographic characteristics of the study group (52.9%) are primary school graduates or below, (67.1%) are not currently employed, the highest (71.5%) are married and the lowest (3.2%) are divorced.

Table (3): ***Frequencies and percentages of climacteric complaints***

| Complaints | Pre. (155) | | Peri. (94) | | Post. (161) | | Total | |
|---|---|---|---|---|---|---|---|---|
| | **No.** | **%** | **No.** | **%** | **No.** | **%** | **No.** | **%** |
| ***Characteristics of climacteric*** | | | | | | | | |
| **Hot flushes** | 34 | 21.9 | **61** | **64.9** | **141** | **87.6** | 236 | 57.6 |
| **Night sweats** | 30 | 19.4 | **50** | **53.2** | **125** | **77.6** | 205 | 50.0 |
| Loss of voiding control | 21 | 13.6 | 40 | 42.6 | 71 | 44.1 | 132 | 32.2 |
| Vaginal dryness | 7 | 4.5 | 13 | 13.8 | 59 | 36.7 | 79 | 19.3 |
| Vulvar burning & itching | 7 | 4.5 | 26 | 27.7 | 54 | 33.5 | 87 | 21.2 |
| Dyspareuria | 5 | 3.2 | 11 | 11.7 | 31 | 19.3 | 47 | 11.5 |
| ***Psychosomatic*** | | | | | | | | |
| **Feeling of weakness & tiredness** | 62 | 40.0 | **69** | **73.4** | **133** | **82.6** | 264 | 64.4 |
| **Feeling anxiety** | 57 | 36.8 | **57** | **60.6** | **112** | **69.6** | 226 | 55.1 |
| **Unstable emotion** | 46 | 29.7 | **60** | **63.8** | **110** | **68.3** | 216 | 52.7 |
| **Temporary loss of memory** | 52 | 33.6 | **67** | **71.3** | **109** | **67.7** | 218 | 55.6 |
| **Insomnia** | 50 | 32.3 | **55** | **58.5** | **109** | **67.7** | 214 | 32.2 |
| **Dizziness** | 47 | 30.3 | **64** | **68.1** | **108** | **67.1** | 219 | 53.4 |
| **Headache** | 55 | 35.5 | **64** | **68.1** | **106** | **65.9** | 225 | 54.9 |
| **Feeling depressed** | 51 | 32.9 | **62** | **66.0** | **103** | **64.0** | 216 | 52.7 |
| **Palpitation** | 36 | 23.2 | **50** | **53.2** | **102** | **63.4** | 188 | 45.9 |

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| **Chest pounding** | 45 | 29.0 | **51** | **54.3** | **101** | **62.7** | 197 | 48.1 |
| **Nervous tension** | 56 | 36.1 | **60** | **63.8** | **48** | **60.9** | 214 | 52.2 |
| **Shortness of breath** | 28 | 18.1 | **50** | **53.2** | **89** | **55.3** | 167 | 40.7 |
| **Inability to concentrate** | 41 | 26.5 | **48** | **51.1** | **86** | **53.4** | 171 | 41.7 |
| Suffocating feeling | 32 | 20.7 | 46 | 48.9 | 72 | 44.7 | 151 | 36.9 |
| Loss of libido | 27 | 17.4 | 34 | 36.2 | 54 | 33.5 | 115 | 28.1 |
| Feeling unattractive | 13 | 8.4 | 32 | 34.0 | 33 | 20.5 | 78 | 19.0 |
| ***General somatic*** | | | | | | | | |
| **Joint aches** | 73 | 47.1 | **72** | **76.6** | **138** | **85.7** | 283 | 69.0 |
| **Fingers numbness** | 49 | 31.6 | **57** | **60.4** | **96** | **59.3** | 202 | 49.3 |
| Weight gain | 46 | 29.7 | 44 | 46.8 | 76 | 47.2 | 166 | 40.5 |
| Pins and needles in hand and feet | 26 | 16.8 | 38 | 40.4 | 64 | 39.8 | 128 | 31.2 |
| Nausea | 24 | 15.5 | 28 | 29.8 | 45 | 28.0 | 97 | 23.7 |
| Increase appetite | 27 | 17.5 | 16 | 17.0 | 39 | 24.2 | 82 | 20.0 |
| Constipation | 22 | 17.4 | 23 | 24.5 | 37 | 23.0 | 82 | 20.0 |
| Diarrhea | 11 | 7.1 | 10 | 10.6 | 19 | 11.8 | 40 | 9.8 |

Table (3) shows the frequencies and percentages of climacteric complaints (three categories) according to menstrual status among the study groups.

Regarding the first category of climacteric complaints (characteristics of climacteric complaints), the prevalence of hot flushes is highest among peri. and postmenopause women (64.9% and 87.6%) and night sweats (53.2% and 77.6%) respectively, while the lowest is

among pre-menopause women (21.9% for hot flushes and 19.4% for night sweats). The other complaints including loss of voiding control, vaginal dryness, vulva itching and burning, and dyspareunia show lower frequencies among all the women.

The second category of climacteric complaints, (psychosomatic complaints) most of complaints (13 out of 16) were reported by more than half of both peri and post- menopause women and as follows: weakness (73.4 and 64.4%), anxiety (60.6 and 69.6%), unstable emotion (63.8 and 68.3%), temporary loss of memory (71.3 and 67.7%), insomnia (58.5 and 67.7%), dizziness (68.1 and 67.1%), headache (68.1 and 65.9%), feeling depressed (66.0 and 64.0%) , palpitation (53.2 and 63.4%), chest pounding (54.3 and 62.7%), nervous tension (63.8 and 60.9%), shortness of breath (53.2 and 55.3%), inability to concentrate (51.1 and 53.4%), while the other complaints including suffocating feeling, loss of libido, and feeling unattractive were reported by less than half of peri and post-menopause women. On the other hand, pre-menopause women reported less psychosomatic complaints.

The third category (general somatic complaints) including joints aches showed the highest prevalence among peri and post-menopause women (76.6 and 85.7%), numbness of fingers (60.4 and 59.3%), while the other somatic complaints showed a lower prevalence among them. Pre-menopause women reported less somatic complaints.

**Table (4)**: *Results of ANOVA (one way analysis of variance) for scores of climacteric complaints according to menstrual status for the study group.*

| Complaints | Pre. (155) M ± SD | Peri.(94) M ± SD | Post (161) M ± SD | Total(410) M ± SD | F | Sig. |
|---|---|---|---|---|---|---|
| Total comp. (30 items) | 7.0+7.6 | **14.4+7.2** | **15.7+5.9** | 12.1+8.0 | 69.6 | 0.000 |
| Characteristics of climacteric (6items) | 0.7±1.3 | **2.1±1.8** | **3.0±1.4** | 1.9±1.8 | 103.2 | 0.000 |
| Psycho. Somatic comp. (16 items) | 4.5±5.0 | **9.2±4.7** | **9.5±4.0** | 7.5±5.1 | 55.6 | 0.000 |
| General somatic comp. (8 items) | 1.8±2.0 | **3.1±1.8** | **3.2±1.6** | 2.6±1.9 | 26.5 | 0.000 |

Table (4) shows the relationship between the mean scores of different climacteric complaints including (total complaints, characteristics of climacteric complaints, psychosomatic complaints, and general somatic complaints) according to the menstrual status for the study group.

- The mean scores of total complaints among peri (14.4+7.2) and post-menopause women (15.7±5.9) are significantly higher compared to pre-menopause women (7.0±7.6) (F=69.6, P=0.000).
- The mean scores of characteristic of climacteric complaints among peri (2.1±1.8) and post-menopause women (3.0±1.4) are significantly higher than the pre-menopause women (0.7±1.3) (F=103.2, P=0.000).
- The mean score of psychosomatic complaints among peri. (9.2±4.7) and post-menopause women (9.5±4.0) are significantly higher compared to the pre-menopause women (4.5±5.0) (F=55.6, P=0.000).
- The mean scores of general somatic complaints among peri (3.1±1.8) and post-menopause women (3.2±1.6) are significantly higher than pre-menopause women (1.8±2.0) (F=26.5, P=0.000).

**Table (5):** Reasons of seeking medical care among peri. and postmenopausal women

| Reasons | Peri (94) | | Post (161) | |
|---|---|---|---|---|
| | No. | % | No. | % |
| **1. Irregular menstruation** | 44 | 46.8 | 50 | 31.1 |
| 2. Missing menstruation | - | - | 18 | 11.2 |
| 3. Hot flushes and cold sweats | 2 | 2.1 | 8 | 5.0 |
| 4. Joints pain | 3 | 3.2 | 12 | 7.5 |
| 5. Psychological problems | - | - | 3 | 1.9 |
| 6. For check up | 1 | 1.1 | 4 | 2.5 |
| 7. Did not seek help due to social, economic, ..etc factors | 38 | 40.4 | 69 | 42.9 |
| 8. Did not seek help because of not having health problems | 7 | 7.4 | 1 | 0.6 |
| Women (peri. & post) who sought help, total = 140 (55.8%)*<br>Women (peri & post) who did not seek help, total = 115 (44.2%)<br>Total from both groups =255 (100%) | | | | |

Table (5) shows the reasons for seeking medical care among the peri and post-menopause women. 55.8% of them had consulted physicians, while (44.2%) of them did not.

Reasons for consultation included:

46.8% peri and 31.1% postmenopause women for irregular mensturation.
11.2% post-menopause women only for missing menstruation
2.1% peri & 5.0% post-menopause women for hot flush and cold sweats.
3.2% peri and 7.5% post-menopause women for joints pain.
1.9% post-menopause women only for psychological problems.
1.1% peri & 2.5% post-menopause women for check up.

**Table (6):** Knowledge of the study group regarding climacteric

| | Pre. | | Peri. | | Post. | | Total | |
|---|---|---|---|---|---|---|---|---|
| | No. | % | No. | % | No. | % | No. | % |
| No | 94 | 60.6 | 53 | 56.4 | 98 | 60.9 | **245** | **59.8** |
| Yes | 61 | 39.4 | 41 | 43.6 | 63 | 39.1 | 165 | 40.2 |
| Total | 155 | 100 | 94 | 100 | 161 | 100 | 410 | 100 |

Table (6) shows that (59.8%) of the group had no knowledge regarding climacteric while 40.2% had limited knowledge.

## ***Discussion***

The highest percentage of the study group (39.3%) are post menopause their age range for experienced natural menopause is (41-58 years) with a mean age of (49.4±3.2 years). It has been reported that approximately 25% of women will experience menopause before the age of 45 years and 95% will be menopaused by the age 55 years[11].

With regard to climacteric complaints, WHO(1996), states that multiplicity of symptoms have been attributed to the menopause and little distinction has been made between symptoms that result from the loss of ovarian function, from the aging process or from the socio-environmental stresses of mid-life years[(2)]. Prevalence of hot flushes among pre. is (21.9%), this proportion rises to (64.9%) and (87.6%) respectively among peri. and post-menopause women. The explanation of the high prevalence rate of vasomotor symptoms among the study group compared with the women from different countries might be due to several factors including, prior poor health status, pre-menstrual and menstrual symptoms (e.g., dysmenorrhea, …etc), low socioeconomic level, unavailability of hormonal replacement therapy, uninformed or misinformed women regarding menopause may impact on women's perception of climacteric complaints. Hot ambient temperature of the country may exacerbate hot flushes, and psychological stress which is related to social factors[12,2]. The present study shows less frequencies of complaints of urogenital atrophy than that of the other studies, this may be explained by the fact that urogenital atrophy is a typical consequences of estrogen deficiency, which is effectively relieved by estrogen treatment, as well as by non-pharmacologic treatment (e.g. sexual activity)[6]. On the other hand, sexual activity and libido decline with aging, this may be influenced more by culture and attitudes rather than by hormonal changes, and by strength of relationship and the physical condition of the partner. So the gradual loss of libido leads to decreased sexual activity making women un-aware or less feeling of urogenital atrophy including vaginal dryness, burning, and dyspareunia[13] with regard to the present study observation may support the notion that loss of libido and less sexual activity make women unaware or complain less of urogenital atrophy.

Most of psychosomatic complaints are experienced by more than half of prei and post-menopause women. These figures are discrepant than previous studies which may be related to prior depressive episodes, poor current or past health status, stressful life events, unavailability of HRT[14,15].

Somatic complaints, only joints aches and fingers numbness show highest frequencies among peri and post-menopaus women which might be related to excessive fatigue due to much work and responsibilities that some women had. This supports the notion that the role of women in midlife changes and increases. On the other hnd, sedentary life, low intake of calcium, and some women tend to give somatic expression to their worries and anxieties[2].

The relationship between the mean scores of different climacteric complaints and menstrual status show that the mean scores of different climacteric complaints increase as climacteric age increases. This supports the notion that the climacteric complaints increase as climacteric age increases (meaning more estrogens reduction)[12].

With regard to women seeking medical care, data show that more than half consulted physician and mainly for irregular menstruation, while they are less concerned with other climacteric complaints. This could be explained by the fact that the decision of the women

may be influenced by the degree of understanding the causes of complaints, their perception of complaints, availability of and attitudes toward health services.

On the other hand the finding indicates that more than half of the study group have no knowledge regarding climacteric, while the other have inadequate knowledge gained from doctor, mother, sister, …ect. This might be due to physician's failure to provide women with enough information concerning climacteric, and may explain facts in medical terms without consideration of the understanding of the women. In addition, women with little education or have less understanding of climacteric changes. In general, the majority of women are unable to discuss the climacteric and its consequences freely with the physician, nurse which is probably an important avenue for learning about climacteric.

Over all, the nurses, most of whom are women themselves are unable to fill these gaps in women's understanding of climacteric changes and play an important role guiding, instructing, and supporting women to help them to cope with the changes of the climacteric. The absence of educational programs to the public through educational media, may contribute to less awareness and understanding of this issue.

## ***Recommendations***

Based on the study finding, the following recommendations are made:

1- Establishing menopausal counseling clinics within primary health care centers, providing screening, treatment, and preventive measures.
2- Involveing women in preventive programs, which improve the quality of women's lives. It is more important than ever to educate nurses and clinicians about the climacteric during their basic studies.
3- Health education and instructions concerning women health should be offered via educational media.
4- Further studies concerning climacteric and women health should be conducted.

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