



Assessment the knowledge of Menopausal symptoms among middle age women in Basra city

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ABSTRACT

Menopause is natural and expected part of a women's development; it is a normal events that marks the end of fertility and child –bearing years. so it is vital to inform the women about risk factors and preventive strategies to avoid term disorders in this stage.

A descriptive analytic study was conducted to identify women's knowledge and health practices regarding menopausal stage in Basra city.

A purposive sample of (50) women data were collected by using a questionnaire format. During 5th November /2014 to 25th / March /2015). Descriptive statistical procedures (frequencies percentage and mean score) were used to analyze the data .

The result of study showed that the highest percentage (40-45) years and low level of socioeconomic status and majority of them were Employed with. Institute level education Most of them were multipara (30%), and of them (54%) no have abortion .

Most of them (40. %) Suffering of obese by using BMI calculi.

Most of them had satisfied knowledge regarding to (Feeling exhaust & fatigue) with high score (1.9),which is common symptoms' during this stage in this period of study

KEYWORDS :

Introduction

Menopause is the permanent cessation of menstruation, which generally occurs between 40-60 years at midlife, and the middle-aged women population is projected to grow rapidly [1].The medium age of menopause age of is (50-52) in industrialized countries & about 1-2 years younger in developing countries Middle-aged women's health has been underscored as their social status and the standard of living has improved along with growth of the population of women, which was relatively faster than that of men population. Women in the transition from midlife to elder status are more likely to undergo various and complex health problems, and to draw medical attention due to an risk of lowered quality of elderly life increased Peri- and post-menopause women experience a wide range of menopause symptoms, and their lifestyle patterns and physical, psychological, social and spiritual adaptation directly affecting elderly health improvement are considerably crucial.

Many middle-aged women worry about losing their womanhood and attractiveness after menopause, and may suffer from the physical symptoms of menopause. Moreover, per-menopausal women may experience a sense of loss and worthlessness after they stop giving values to maternal roles as their children grow and become independent.

Women facing postmenopausal changes can lead a richer life by looking at life in a positive perspective as man opportunity for inner maturity[2].Since postmenopausal women at midlife experience various problems ,Appropriate understanding of women that certain physical, mental, social and psychological changes occur during menopause helps them with greater readiness to cope with these changes [3].

Menopause is the permanent en of a woman's menstrual periods. Menopause occurs naturally, or it can be caused by surgery, chemotherapy, or radiation. Natural products or mind and body practices are sometimes used in an effort to relieve menopausal symptoms such as hot flashes and night sweats. This fact sheet provides basic information about menopause [4] .

During menopausal ovulation (egg product) ceases ,eliminating the possibility of pregnancy & menstruation become less frequent & eventually stops.

As some women ;menstrual activity stops suddenly but usually it tapers off, both in amount & duration of flow & frequently menstrual periods become more closely or more widely spaced, this irregularity

may be last for (2-3) years before menstruation finally ceases.

As a women approaches this stage , the hormone levels in her body start to shift estrogen & progesterone levels decline sharply ,stabilizing a few years after the final menstrual period levels of two pituitary hormones follicle stimulating hormone (FSH)luteinizing hormone (LH) become variable during the menstrual transition but increase over time .In addition irregular bleeding pattern declining fertility ,menopausal women may experience the following symptoms .

In addition irregular bleeding pattern declining fertility ,menopausal women may experience the following symptoms:

- Vaso motor symptoms (hot flash, night sweet palpations dizziness.
- Urogenital symptoms: irregular bleeding in continence bladder infection vaginal & pain during intercourse.
- Psychological symptoms : anxiety and irritability
- Other (insomnia ,backache , headache ,and fluid retention)

Importance of the study.

Menopause is a normal developmental period experienced by women in midlife. It happens in critical period of women's life where there is a lot of social transition and it coincides with empty nest syndrome, when children leave home and women find their selves alone with increased incidence of psychosomatic symptoms. For that, the idea of managing menopause by hormoneReplacement therapy (HRT) is becoming preferable to ameliorate the recent complaint of menopause and to prevent its medical sequel such as osteoporosis and ischemic heart disease [5].

Background

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.

- Usual age 45 to 50yrs average being 47yrs.
- Premature menopause - before 40 yrs. • Late menopause – menstruation beyond 52 yrs.
- Delayed menopause – Due to good health and better nutrition. – Also seen in women with uterine fibroids. – Also in women with high risk of endometrial cancer

Modern medicine has significantly prolonged human lifespan [6]. All women who live long enough will make transition to menopause [7].

The common climacteric symptoms experienced by them can be group into: vasomotor, physical, psychological or sexual complaints. It was also noted in some postmenopausal women with long term estrogen deficiency, changes to the cardiovascular or bone which leads to osteoporosis. It is well documented that menopausal symptoms experienced by women affect their quality of life [8]. *Menopause is the depletion of ovarian function followed by cessation of menstruation and is usually diagnosed when a woman who do not have menstrual period for 12 consecutive months without any other biological or physiological cause [9]. For middle age women this loss is critical issue as it that represents the end of fertility and onset of aging process. Owing to lack of estrogen women during menopause may experience compromised physical wellbeing and climacteric symptoms such as mucosal dryness, hot flushes, night sweats and emotional fluctuation. Numerous factors including menopausal status, social background, and education, physical and emotional health may influence women's knowledge and beliefs about menopause[10].*

As it is well known today that socio cultural factors can alter women's attitude and experience of menopausal symptoms. These symptoms are found to be less common in societies where menopause is viewed as positive rather than negative event. This cultural aspect of menopausal symptoms have been described in number of studies among Asian women, including Japanese and Chinese women [11]. Menopause, also known as climacteric, is the time in a woman's life when her menstrual periods stop and she is no longer able to have children.[12] It is said to have occurred when a woman has not had a period for a year.[13] This typically occurs between 45 and 55 years of age.[12] Menopause occurs in all women.[13]

1. perimenopause :

- 1- woman's periods are usually irregular.
 - 2- hot flashes which typically last 30 seconds to ten minutes and maybe
- Associated with shivering, sweating and reddening of the skin.[14] Typically hot flashes stop occurring after a year or two.[12]*
- 3-Other symptoms may include: vaginal dryness, trouble sleeping, and mood changes.[14]
 - 4- The severity of symptoms varies between women.[12] While often linked to heart disease and osteoporosis these primarily occur due to increasing age and not any direct relationship with menopause. Some previous problems that may have been present like endometriosis or painful periods may improve with menopause.[12]

2. Early Menopause

is usually a natural change.[15] An early menopause can be related It can occur earlier in those who

- 1-smoke tobacco.
- 2-surgery that removes both ovaries.& removal of the uterus.[16]
- 3-some types of chemotherapy,or radiation ([Source: WHO)
- 4- At the chemical level menopause is due to a decrease in production of the hormones estrogen and progesterone. .[12]
- 5-body mass index,
- 6- racial and ethnic factors,
- 7-illnesses,

Signs and symptoms:

- 1-Hot flashes (aka hot flushes), also including
- 2-night sweats,.
- 3-Possible but contentious increased risk of atherosclerosis[17]
- 4-Migraine .
- 5-Rapid heartbeat
- 6-Dysfunctional uterine bleeding as part of menstruation. Women approaching menopause often experience this due to the hormonal changes .

Urogenital atrophy:

- *: Atrophic vaginitis Also known as vaginal atrophy
- *Thinning of the membranes of the vulva, the vagina, the cervix, and also the outer urinary tract, along with considerable shrinking and loss in elasticity of all of the outer and inner genital areas.
- *Itching

*Dryness*Watery discharge*Urinary frequency*Urinary urgency

Skeletal

- *Back pain*Joint pain,*Muscle pain*Osteopenia and the risk of osteoporosis gradually developing over time Skin, Hair, and Other Tissue Changes There are many changes in skin and hair. Loss of fatty tissue and collagen.
- *Breast atrophy*Breast tenderness ± swelling*Decreased elasticity of the skin
- *Skin thinning and becoming drier Psychological.
- *Depression and/or anxiety[17]
- *Fatigue
- *Irritability
- *Memory loss, and problems with concentration
- *Mood disturbance
- *Sleep disturbances, poor or light sleep, insomnia, and daytime sleepiness[9]

Sexual.

***Painful intercourse,*Decreased libido[18],Problems reaching orgasm.**

Heart and blood vessel (cardiovascular) disease. When estrogen levels decline, risk of cardiovascular disease increases. Heart disease is the leading cause of death in women as well as in men. So it's important to get regular exercise, eat a healthy diet and maintain a normal weight. Can the doctor for advice on how to protect women heart, such as how to reduce cholesterol or blood pressure if it's too high, but the risk can be reduced by managing risk factors, such as tobacco smoking, hypertension, increased blood lipids and body weight.[19]

Osteoporosis. This condition causes bones to become brittle and weak, leading to an increased risk of fractures. During the first few years after menopause, may lose bone density at a rapid rate, increasing risk of osteoporosis. Postmenopausal women with osteoporosis are especially susceptible to fractures of their hips, wrists and spine.[20]

Recommendation to good nutritional food with calcium supplement, advise family history of hip fracture and Low BMI is a risk factor for osteoporosis. Can be minimized by smoking cessation, adequate vitamin D intake and regular weight-bearing exercise. The bisphosphate drug alendronate may decrease the risk of a fracture, in women that have both bone loss and a previous fracture and less so for those with just osteoporosis.[21]

Weight gain. Many women gain weight during the menopausal transition and after menopause because metabolism slows. Women may need to eat less and exercise more, just to maintain your current weight.

postmenopausal

Menopauses is a natural life change, not a disease state or a disorder. The transition itself has a variable degree of effects, and for some it can be a difficult time of life.[22]

The reason for this delay in declaring post-menopause is because periods are usually erratic at this time of life, and therefore a reasonably long stretch of time is necessary to be sure that the cycling has actually ceased completely. At this point a woman is considered infertile; however, the possibility of becoming pregnant has usually been very low (but not quite zero) for a number of years before this point is reached.

A woman's reproductive hormone levels continue to drop and fluctuate for some time into post-menopause, so hormone withdrawal effects such as hot flashes may take several years to disappear.

Complication & Treatment

Education women arrive at their menopause transition years without knowing anything about what they might expect, or when or how the process might happen, and how long it might take. Very often a woman has not been informed in any way about this stage of life; she has received no information from her physician, or from her older female family members, or from her social group. Individual counseling or support groups can sometimes be helpful to handle sad, depressed, anxious or confused feelings women may be having as they pass through what can be for some a very challenging tran-

sition time.

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Urinary incontinence. As the tissues of vagina and urethra lose elasticity, women may experience frequent, sudden, strong urges to urinate, followed by an involuntary loss of urine (urge incontinence), or the loss of urine with coughing, laughing or lifting (stress incontinence). may have urinary tract infections more often. Strengthening pelvic floor muscles with **Kegel exercises** and using a topical vaginal estrogen may help relieve symptoms of incontinence.

Sexual function. Vaginal dryness from decreased moisture production and loss of elasticity can cause discomfort and slight bleeding during sexual intercourse. Also, decreased sensation may reduce your desire for sexual activity (libido).

Water-based vaginal moisturizers and lubricants may help. Choose products that don't contain glycerin because women who are sensitive to this chemical may experience burning and irritation. If a vaginal lubricant isn't enough, many women benefit from the use of local vaginal estrogen treatment, available as a vaginal cream, tablet or ring. Low-dose prescription vaginal estrogen products such as estrogen creams are generally a safe way to use estrogen topically, to help vaginal thinning and dryness problems) while only minimally increasing the levels of estrogen in the bloodstream.

Nurses for the care of menopausal women.

Menopause is not a disease. Menopausal care requires an assessment of a woman's needs and provision of the means to manage symptoms and maintain or improve her health after the menopausal transition. Most often, this type of care is focused on counseling and education – skills in which nurses excel and for which nurses generally have more time than theirs. menopause, multidisciplinary practice and sociocultural aspects of menopause care [24]. The nurses who completed the above-mentioned course completed an evaluation that showed that a number of the nurses described their knowledge as moving from 'poor' prior to the course to 'excellent' following the course.

The role of nurses in providing menopausal care is probably under-utilized in many parts of the world. Many nurses may describe their knowledge about menopause as poor, like the nurses prior to the menopause course, although one might also find that physicians not specializing in menopause might also describe their knowledge of menopause as 'poor'. Nevertheless, the utilization of nurses in the care of the menopausal patient could improve the standard of care if these nurses are provided with an adequate knowledge base about the menopause. Physician colleagues. Counseling and education must be based on accurate knowledge about menopause.

Methodology

A descriptive analytic study was conducted on women in their menopausal stage in order to identify their knowledge carried concerning menopausal age, at (AL-Basracity). Non-probability sample (purposeful sample) consisted of four fifty [24] women in menopausal age.

Inclusions Criteria.

Were selected according to these Criteria.

- Women's age 45 years and over.
- Women's has permanent cessation of menstrual cycle

Tool used for data collection.

The instrument was designed and constructed by the investigators after reviewing related literature and previous studies which consisted of the following parts.

Socio- Demographic Characteristics:

Demographic data relative to Socio-demographic data characteristic such as, age, and education level for study sample, weight and high for BMI for study sample, occupation status for study sample and their socioeconomic status for family, according to WHO.

Body mass index:

Instrument were used to measure Body Mass Index, Body mass index was computed as weight in kilograms divided by the square of height in meter (Knox et.2004).

Reproductive History:

This section concerned with the following data of age of menarche, number of Gravidity, number of Parity, number of deliveries, number of Abortion, characteristics of cessation of menstruation

Items related of knowledge which consisted of (23) items regarding definition & of characteristic menopausal symptoms. Dates were collected through interviewing, recording and examination technique (5th November /2014 to 25th March/2015). Data analysis of study sample was done by using the SPSS (Statistical Package for Social Sciences) (version 19)

Result

Sociodemographic characteristics

Table (.1) distribution of (50) aborted Sociodemographic characteristics .

Demographic Variable		
Age /years	N=50	%
40-45	20	40
46-51	11	22
52-57	6	12
58-63	13	26
Mean ± SD=49.72 ± 7.13		
Women education		
Illiterate	10	20
Primary	5	10
Intermediate	8	16
Secondary	10	20
Institute	12	24
College	5	10
TOTAL	50	100
Women occupation		
House wife.	10	20
Employed	25	50
Student	10	20
Free work	5	10
Total	50	100
Level of Economic status Family		
High score=121-150	9	18
Middle=120-90	16	32
Low89 and less	25	50
Total	50	100.0

Table (.1) show that the highest percentage (40%) of study sample at age group (40-45) years, while the lowers percentage (12%) their age group was (52-57) years and with Mean and SD (49.72 ± 7.13). Regarding level of education women for study sample, the highest percentage (24%) of study sample was Institute education, while the lowers percentage (10%) was Primary school educated .

Regarding occupation mother for study sample, the highest percentage (25%) of study sample there were Employed s, while the lowers percentage (10%) was a free work . Regarding Socio-Economic status, the highest percentage (50%) of study sample in low Socio-Economic status, while the lowers percentage (18%) was in high Socio-Economic status .

Table (2) Distribution of the Study Sample According to duration of cessation of menstruation

Duration of cessation of menstruation /month	No	%
Less than 12 months	9	18%
13-24 months'	4	2%
25 months &above	37	74%
Total	50	100%

Table (2) show that the highest percentage (74%) of study had cessation their menstruation 25 months &above , while the lowers percentage 2% of them had cessation their cycle (13-24)months

Table (3) Distribution of the Study Sample According Body Mass Index

BMI Groups No	Variables	Variables	
		%	
underweight	≤ 18.5	1	2%
Normal weight	18.5-24.9	16	32%
Overweight	25- 29.9	13	26.%
Obese	≥30	20	40.%
total		50	100.0

Table (3) shows that highest percentage (40%) of study sample whit group obese t, while the lowest percentage (2%) of study sample whit group underweight.

Table (4) knowledge of study sample regarding menopause symptoms (3- levels scale) by total frequency and mean score.

No	Items knowledge concerning menopause	Yes	Un-certain	No	M.S
1	Women can no longer get pregnant	27	2	21	1.12
2	Permanent cessation of menstruation	28	2	20	1.16
3	The first indicator for menopause age is irregular of menstruation.	34	6	10	1.48
4	At menopause the ovaries stop releasing eggs	32	8	10	1.44
5	Decreased estrogen & progesterone secretion from ovaries	24	22	4	1.40
6	Some women experience no discomfort during menopause.	42	4	4	1.36
7	All the women have gone through menopause by the time they are 51	16	8	26	0.8
8	Hot flashes are the most common physical symptoms during menopause	34	11	5	1.58
9	Hot flashes & night sweat are symptoms during menopause	32	13	5	1.54
10	Loss appetite is common symptoms.	23	6	21	1.04
11	Loss & change in sexual desire.	19	22	9	0.8
12	Weight gain.	36	3	11	1.5
13	Loss hair.	40	1	9	1.62
14	Sleepiness(less sleeping hours	35	3	12	1.46
15	Feeling exhaust & fatigue	47	1	2	1.9
16	Insomnia	35	4	11	1.48
17	Change in mood& depression	45	1	4	1.8
18	Headache	38	4	8	1.6
19	Change in memory &concentration	33	2	15	1.36
20	Incidence of osteoporosis during menopause.	47	0	3	1.88
21	Incidence of bone fracture in female more than male	36	12	2	1.6
22	Hormone replacement therapies reduce the menopause symptoms.	19	20	11	1.6
23	Incidence of cardiovascular disease more in menopause stage.	45	2	3	1.84

*high mean score =1

Table (4) show that Incidence that the high mean score regarding items (15) Feeling exhaust & fatigue, while the lowers mean score regarding items (7&11)(All the women have gone through menopause by the time they are 51) &(Loss & change in sexual desire.

Discussion

The present study reveals that the highest percentage (40%),of study sample are group between (40-45) years of age while the lowers percentage (12%) their age group was (52-57) years and with Mean and SD (49.72 ± 7.13),as show in table (4.1).The medium age women at menopause is 51 years age at menopause range from 50 years is reported by (Abdul Rahman^{1*},2010) .In a study they had result that about fifty percent of women were between 45-49 (*Karen Nakano,2012*). The mean age was (55.05±6.12.)[*nasir nusrate,2008*]

Regarding level of education women for study sample, the highest percentage (24%) of study sample was Institute education, while the lowers percentage (10%) was Primary school educated.The majority were graduated ,and they having at minimum a high. School degree for level of education. (Justine carter, 2009)

Regarding occupation mother for study sample, the highest percentage (25%) of study sample there were Employed s, while the lowers percentage (10%) was a free work.

While full or part time occupation was the largest percent in the study of (LottaLindh-Åstrand (2009).Professional occupations were 41.8%, while non-professional occupations were 58.2%. (Eun Kyung Kwak,2014)

Regarding Socio-Economic status, the highest percentage (50%) of study sample in low Socio-Economic status, while the lowers percentage (18%) was in high Socio-Economic status.The higher percentage belong for poor socioeconomic group (nasir).Economic status was " High" in 4.2%, " Moderate" in 68.8%, and " Low" in 27.0%. (Eun Kyung Kwak)

Regarding the duration of cessation of menstruation the highest percentage (74%) of study had cessation of menstruation before 25 months and above ,while the lowers percentage 2%of them had cessation there cycle 13-24 months ago.

The table(4-8)shows that the highest percentage (40%)of study sample are obese , while the lower percentage (2%)of study sample are under weight .The average BMI was 28.6 kg/m² , approximately one third had a BMI of > 30 kg/m²(*Karen Nakano(2012)*)

Knowledge of study sample regarding menopause

The table [4-7]show that the high mean score regarding items (15) feeling exhaustion and fatigue ,while the lower mean score are (7,11)(all the women have gone through menopause by the time they are 51)&(loss and change in sexual desire)

The five most common symptoms for all women were feeling tired(92 . 9 0 %), head -ache (88 .8 0%), joint and muscular discomfort (76 .2 0%),physical and mental exhaustion (60.90%) and sleeplessness(54.40%). (Shahedur Rahman,2011)

They agreed that joint and muscle ache (81.8 %) and tiredness (70.7%) were on the top of list of symptoms while perspiration (61.6%) and hot flashes (57.6%) were lower in the list. (*EmanS,1999*)

53.5%and 41.4% of them sew change of body weight and change of breast size as signs related to menopause consequently and only 36.4% and 35.3% agreed that change of vagina and loss of libido are menopausal signs. (*EmanS,1999*)

About third of women thought that menopause ,happen at age of 50 and above which is universally true(*EmanS,1999*)

Conclusions:

Based on the finding of this study:

1-The study showed that the higher percentage of aborted women were aging (40-45) years , Institute graduates , Employed ,living in Urban area, families nonsmoker , and of low level socioeconomic states .

2- The study also presented that the higher percentage of aborted women, whit **cessation of menstruation**74% of them (25 months &above). Their pregnancy number (1-3) and there, and no have abortion.

3-Most of the aborted women having obesity (40.%)

4.2. Recommendations

In view of the above conclusion the following would be recommended:

- Accurate estimation of the age of menopause is considered to be great importance
- The age of menopause should be recorded in terms of months or season in addition to years.
- Preparation written materials for providing better information and education regarding menopausal stage

REFERENCES

- Statistics Korea. 2012 life tables for Korea. Daejeon: StatisticsKorea, 2012. [Cited by 2014 March 20]. Available from: http://kosis.kr/statisticsList/statisticsList_01List.jsp?vwcd=MT_ZTITLE&parmTabld=M_01_01#SubCont | Yeo JH. Sex-role attitude and management of menopause among middle-aged women in a local area. *J Korean Soc | Matern Child Health* 2004; 8: 199-210 | Noroozi E, Dolatabadi NK, Eslami AA, Hassanzadeh A, Davari S. Knowledge and attitude toward menopause | phenomenon among women aged 40-45 years. *J Educ Health Promot* 2013; 2: 25 | Eun Kyung Kwak1, Hyun Soon Park2, Nam Mi Kang3 , Menopause Knowledge, Attitude, Symptom an Management among Midlife Employed Women , *Journal of Menopausal Medicine* 2014;20:118-125, Copyright © 2014 by The Korean Society of Menopause | | . EmanS, Abdulmajeed A and Ibtisam | *Family Physicians, MOH, Abu Dhabi, UAB Vol. 2, No.2, October, 1999* | 217 - 222 *Suez Canal Univ Med J* | Changa MH, Wangb SJ, Wangc PH, FuhdJL:Attitudes towards Menopause | among Middle-Aged Women: A Community Survey In an Island Of | Taiwan.*Maturitas*2005;52:348-355 | Wang SJ, Lue SR, Juang KD, Chiu LM:TheKinmen women-health | investigation (kiwi): a menopausal study of 40-54. | *Maturitas*2001;39:117-120 | Dhillon HK, Singh HJ, Rashidah S, Abdul Manaf H, NikMohdZaki NM: | Prevalence of menopausal symptoms in women in Kelantan, Malaysia. | *Maturitas*2006;54:213-221 | . | Arroyo A, Yeh J. Understanding the menopausal transition, | and managing its clinical challenges. *Sexuality Reproduction | &Menopause* 2005;3:7-12. | Avis NE, Mckinlay SM. A longitudinal analysis of women's | attitudes towards the menopause: results from the | Massachusetts women's health survey. *Maturitas* | 1991;13:65-79 | Lock M. Ambiguities of aging: Japanese experience and | perception of menopause. *Cult. Med. Psychiatry.* | 1986;10:23-46 | bc"Menopause: Overview". <http://www.nichd.nih.gov.> 06/28/2013. Retrieved 8 March 2015. Check date values in: `|date= (help)` | | bc"What is menopause?". [http://www.nichd.nih.gov/.](http://www.nichd.nih.gov/) 06/28/2013. Retrieved 8 March 2015. Check date values in: `|date= (help)` | | "What are the symptoms of menopause?". [http://www.nichd.nih.gov/.](http://www.nichd.nih.gov/) 05/06/2013. Retrieved 8 March 2015. Check date values in: `|date= (help)` | | "What causes menopause?". [http://www.nichd.nih.gov/.](http://www.nichd.nih.gov/) 05/06/2013. Retrieved 8 March 2015. Check date values in: `|date= (help)` | How do health care providers diagnose menopause?". <http://www.nichd.nih.gov.> 05/06/2013. Retrieved 8 March 2015. Check date values in: `|date= (help)` | Mitchell, Richard Sheppard; Kumar, Vinay; Abul K.; Fausto, Nelson (2007). *Robbins Basic Pathology: With Student Consult Online Access*. Philadelphia: Saunders. p. 344. ISBN 1-4160-2973-7. 8th editio | | Llanaez P, García-Portilla MP, Llanaez-Suárez D, Armott B, Pérez-López FR (2012). "Depressive disorders and the menopause transition". *Maturitas* 71 (2): 120-30. doi:10.1016/j.maturitas.2011.11.017. PMID 22196311 | | Pérez-López FR, Chedraui P, Gilbert JJ, Pérez-Roncero G (2009). "Cardiovascular risk in menopausal women an prevalent related co-morbid conditions: facing the post-Women's Health Initiative era.". *FertilSteril* 92 (4). pp. 1171-1186. doi:10.1016/j.fertnstert.2009.06.032. PMID 19700149 | | bTwiss JJ, Wegner J, Hunter M, Kelsay M, Rathe-Hart M, Salado W (2007). "Perimenopausal symptoms, quality of life, and health behaviors in users and nonusers of hormone therapy". *J Am Acad Nurse Pract* 19 (11): 602-13. doi:10.1111/j.1745-7599.2007.00260.x. PMID 17970860 | | Wells GA, Cranney A, Peterson J, Boucher M, Shea B, Robinson V, Coyle D, Tugwell P (Jan 23, 2008). "Alendronate for the primary and secondary prevention of osteoporotic fractures in postmenopausal women.". *The Cochrane database of systematic reviews* (1): CD001155. doi:10.1002/14651858.CD001155.pub2. PMID 18253985. | | et al. "Risk for New Onset of Depression During the Menopausal TransitionThe Harvard Study of Moods and Cycles". *JAMA*. Retrieved 28 September 2013. | | Abernethy K, Bentley GR, Sievert LL, et al. Nurse education in menopause: evaluation of learning in first cohort of a University accredited course in menopause and health. *Menopause Int* 2008;14:188-92. Published December 2008. | <http://www.ncbi.nlm.nih.gov/pubmed/19037079> | chedraui P, Pérez-López FR, Mendoza M, Leimberg ML, Martínez MA, Vallarino V, Hidalgo L. (2010). "Factors related to increased daytime sleepiness during the menopausal transition as evaluated by the Epworth sleepiness scale". *Maturitas* 65 (1). pp. 75-80. doi:10.1016/j.maturitas.2009.11.003. PMID 19945237 | | Arakane M, Castillo C, Rosero MF, Peñafiel R, Pérez-López FR, Chedraui P. (2011). "Factors relating to insomnia during the menopausal transition as evaluated by the Insomnia Severity Index". *Maturitas* 69 (2). pp. 157-161. doi:10.1016/j.maturitas.2011.02.015. PMID 21444163 | | Monterrosa-Castro A, Marrugo-Flórez M, Romero-Pérez I, Chedraui P, Fernández-Alonso AM, Pérez-López FR (2013). "Prevalence of insomnia and related factors in a large mid-aged female Colombian sample.". *Maturitas* 74 (4): 346-51. doi:10.1016/j.maturitas.2013.01.009. PMID 23391501. | Pérez-López FR, Fernández-Alonso AM, Trbalón-Pastor M, Vara C, Chedraui P (2012). "Assessment of sexual function and related factors in mid-aged sexually active Spanish women with the six-item Female Sex Function Index.". *Menopause* 19 (11): 1224-30. doi:10.1097/gme.0b013e3182546242. PMID 22781787 | | Ornat L, Martínez-Deearth R, Muñoz A, Franco P, Alonso B, Tajada M, Pérez-López FR (2012). "Sexual function, satisfaction with life and menopausal symptoms in middle-aged women.". *Maturitas* 75 (3): 261-9. doi:10.1016/j.maturitas.2013.04.007. PMID 23684086 | | b Freeman EW, Sammel MD, Lin H, Gracia CR, Pien GW, Nelson DB, Sheng L (2007). "Symptoms associated with menopausal transition and reproductive hormones in midlife women". *Obstetrics and gynecology* 110 (2 Pt 1): 230-40. doi:10.1097/01.AOG.0000270153.59102.40. PMID 17666595 | | Pien GW, Sammel MD, Freeman EW, Lin H, DeBlasis TL (July 2008). "Predictors of sleep quality in women in the menopausal transition". *Sleep* 31 (7): 991-9. PMC 2491505. PMID 18652094. | | "Perimenopausal risk factors and future health". *Human Reproduction Update* 17 (5): 706-717. 2011. doi:10.1093/humupd/dmr020. PMID 21565809 | | Holloway D, Abernathy K, Hillard A, et al. One-title-nurse, multiple roles, a demonstration of the role of nurses in menopause in the UK. In *Proceedings of the Annual Meeting of the British Menopause Society, 2008. Menopause Int* 2008;14:189 (abstract). Published December, 2008 | Anna Chelnokova/Shutterstock.com, Menopausal Symptoms and Complementary Health Practices, National Institutes of Health | U.S. Department of Health and Human Services ♦♦♦2013- | Rahman SASA, Zainudin SR, KarMunVL:Assessment of menopausal symptoms using modified Menopause Rating Scale (MRS) among | middle age women in Kuching, Sarawak, Malaysia.*Asia Pacific FamilyMedicine*2010;9 | Lu J, Liu J, Eden J:Ti:the experience of menopausal symptoms by Arabic women in Sydney.*Climacteric*2007;10:72-7 | NisarNusrat, ZehraNishat, KNOWLEDGE, ATTITUDE AND EXPERIENCE OF MENOPAUSE, J Ayub Med Coll Abbottabad 2008;20(1) http://www.ayubmed.edu.pk/JAMC/56_PAST/20-1/Nisar.pdf | | Theisen, SC, Mansfield, PK, Seery, BL, Voda, A. Predictors of midlife women's attitudes towards menopause. *Health | Values*1995;19(3):22-3 | Karen Nakano, MD ,MS, Ellen ,Pinnow ,elt ,Reproductive history and hot flashes in peri-menopausal women ,*Journal of women's health.* 2012 Apr;21(4):433-439;doi:10.1089/jwh.