

Women Knowledge, Attitude and Proposed Preventive Health Practices towards Menopausal Symptoms

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Abstract

*An alteration of lifestyle before menopause and the mode of approach to life after menopause can help those who aren't approaching menopause to be prepared for what is ahead of them and thereby reduce the menopause-related health problems and helps them enter this stage of their life with adequate knowledge and a positive attitude. **Aim:** Assess women's knowledge and attitude toward menopausal symptoms and to investigate the health proposed health practices to overcome menopausal problems. **Research design:** A descriptive cross-sectional study design was adopted in this study. **Setting:** the current study was conducted in obstetrics & gynecological outpatient clinics at Sohag University hospital in Sohag city, Egypt from April to September 2017. **Sample:** A convenience sampling of 390 pre-menopausal women who fit the criteria was included in the study. **Tool:** One tool used in the current study named as structure interview questionnaire consisting of four parts: demographic information, questions to assess knowledge, preventive health practice and attitude toward menopause. **Results:** Most of the women had poor level of knowledge about menopause, and less than two thirds of them (60%) had also poor level of knowledge concerning preventive health practice about menopause. Whereas (65%) of the studied women had positive attitude toward menopause. **Conclusion:** The study concluded that women' knowledge level and awareness toward the preventive health practices were low with a positive attitude toward menopause. **Recommendations:** The study recommended that a well-informed continuous, health education program should be imparted to women. Further, emphasis also needs to be given through workshops and seminars about menopause.*

Keywords: Knowledge, Attitude, Menopause, Pre-menopausal women, Preventive health practices

1. Introduction

Women all over the world now have to spend almost one-third of their lives in menopausal years. Therefore, menopause now is a concerning matter to maintain and improve women's health. It is a naturally or medically induced process that occurs in nearly all women to sign the end of their reproductive ability. It marks the conclusion of reproductive capacity of women and results from the permanent cessation of ovarian function. **Dienye et al (2013) & Blümel et al (2012)**

The most common age of menopause takes place between 45 and 52 years but may vary. In western countries, the average age of menopause has been escalated 5 years in the last century **Tanira et al (2009)**, however, in Egypt the mean age is 46.1 years which is considered low when compare it with many countries but this age has been rising recently. Moreover, the Egyptian women portray higher incidence of associated menopausal symptoms than in the west. This finding may reflect the difference in sociocultural attitudes towards the menopause in different communities. **Sallam et al (2006)**

As women spend long time of her life approximately for more than a third of her life during menopause and postmenopausal period, since, this period displays a very important landmarks in a woman's life especially no significant endogenous estrogen produced. (**Ford et al, 2011**)

The lifestyle patterns, physical, psychological, social and spiritual adaptation of peri- and post-menopause are directly affecting elderly health improvement and are considerably essential. Approaching of menopause causes worry of most women especially in middle-age as they were afraid of losing their desirability and attractiveness after menopause, and may complain from the physical symptoms of menopause. **Noroozi et al (2013)** for that being instructed and familiar with these symptoms can help in decreasing of discomfort and worry among the women as stated by **Shilpa and Amit. (2015)**

It was noticed that the women gain less information concerning vasomotor symptoms in terms of perspiration and hot flushes, which constitute the most important symptoms of estrogen withdrawal at menopause, followed by the joint ache and tiredness. These findings may delineate perception of menopause as the start of aging process (**Tosson etal, 2014**).

Moreover, the alteration of lifestyle before menopause and the mode of life after menopause can help the females to be prepared for what is ahead of them and thereby reduce the menopause-related health problems which may affect them. (**Sugunadevi & Divya 2018**)

The most important issue needed to shed the light on is the factors which may have a role on intensity of menopausal symptoms in terms of educational level, social background, physical and emotional health, all these factors have a crucial role on women's knowledge and believes about menopause. Moreover, concerning the psychosocial phenomenon surrounding menopause it is assumed that attitudes, perceptions and expectations are considered an important part, also cultural and social variables represent an important variables have an effect on attitudes to menopause, which may in turn affect menopausal experience and reported symptom. (**Mustafa & Sabir, 2012**)

Ayers et al, 2010 assumed that the perception and views of the menopause as positive or negative varies and it's mainly related to the community itself, for that it is varied in different countries between 60%-90% and the menopausal symptoms are found to be less common in societies where menopause is viewed as positive rather than negative experience.

Most of published researches stipulate its scope on menopausal women, however it is essential to know the background information among those who are during premenopausal period to identify well their level of awareness and attitude toward menopausal symptoms so an ample data base concerning this issue will be available which in turn will help well in preparation of those women to handle menopausal symptoms one reached with a positive attitude. **Simarjeet et al (2018)**

Operational definition of premenopausal women: The term “*per menopause refers to the period of women life that can begin eight to 10 years before menopause, when the ovaries gradually produce less estrogen. It usually starts in a woman's 40s, but can start in the 30s as well*”. McNamara et al (2015)

Significance of the study:

Identifying the knowledge of premenopausal women regarding menopause has a crucial role in the enhancement of accurate and appropriate programs to promote women's health during menopausal years and prepare these women to handle properly the menopausal symptoms **Simarjeet et al (2018)**. Being prepared especially those who are young and not reaching menopause yet with more knowledge about menopause means that they will be more likely to manage menopause better latter, However, those who having more negative attitudes toward menopause were found to experience negative menopause symptoms. A high quality of life can be maintained when menopause-related problems are timely prevented and adequately managed (**Eun et al, 2014**)

Aim of the study:

The current study aimed to assess women's knowledge and attitude towards menopausal symptoms and to investigate the health seeking behavior proposed to overcome intensity of menopausal symptoms.

Research questions:

- What are the total mean score of knowledge, attitude and information related proposed preventive health practices of participants concerning menopause?
- What would be the association of level of knowledge and attitude about menopause with demographic variables?

2. Subjects and Method:

2.1. Study design:

A descriptive cross- sectional design was adopted in this study.

2.2. Settings of the study:

The present study was conducted in the obstetrics and gynecological outpatient clinic at Sohag University hospital-Sohag city in Egypt. This hospital was selected because it is the main hospital in Sohag Governorate and it served also the rural areas surrounded it with its high turnover of cases.

2.3 Subjects: A convenience sampling of 390 women aged (35-< 45) and follow the inclusion criteria (eligible, non-menopausal women, and accepted to participate voluntarily) were enrolled in the study.

2.4 Tool of the study:-

One tool was developed by the researchers; a structured interviewing questionnaire which consisted of 4 parts:

Part (1):- General characteristic data including the items related to demographic characteristics as (age, level of education, occupation, marital status & residence) and obstetric characteristics as (age at menarche, number of children and the source of information about menopause).

Part (2): Knowledge questionnaire which was developed by the researchers and included 26 questions designed in four areas of knowledge a- menopausal definition, b- menopausal

symptoms c-physical & psychological problems, d- complications related to estrogen deficiency in the long term.

Part (3):-Data concerning attitude toward menopause consists of 10 items which was developed by the researchers and designed based on four-choices from (completely agree to completely disagree).

Part (4): A perception of preventive health practices of menopausal symptoms/complications questions, it consists of 16 items which developed by the researchers and included three parts concerning reducing hot flushes, menopausal complications and routine checkups.

Scoring system:

Scores were used to evaluate women’s knowledge about menopause. Questions were scored as 1 mark for correct answer and 0 mark for wrong, don’t know or no answer.

- The total knowledge score was (26) of each aspect was scored as:
 - 18-26 points indicate $\geq 65\%$ was considered good,
 - 9-17 points indicate $50\% - <65\%$ was considered fair,
 - 1-8 points indicate $< 50\%$ was considered poor.
- The total attitude score (40) out of 10 points with a total of 40 score if they completely agree for each item:
 - 1-19 points indicate ($<50\%$) was considered negative attitude.
 - 20-40 points indicate ($\geq 50\%$) was considered positive attitude.
- The total knowledge regarding preventive health practice methods to avoid intensity of menopausal symptoms/complications was (16) items each aspect was scored as:
 - 11- 16 points indicate $\geq 65\%$ was considered good,
 - 9- 10 points indicate $50\% - < 65\%$ was considered fair,
 - 1-8 points indicate $< 50\%$ was considered poor.

2.5. Method

Ethical considerations:

- Ethical approval was obtained from the ethical committee at Sohag University and from Faculty of Nursing to accomplish the research.
- Official permission and approvals for conducting this study was obtained from the authorized personnel in Gynecology & Obstetric Department, manager and the head nurse of the outpatient clinic.
- An informed oral consent was obtained from all participants who were willing to participate in the study after explanation of the purpose of the study, the benefits, the nature, the process and expected outcomes of the study. All rights, anonymity and confidentiality of the respondents were respected and they have the right to abstain from the study at any time regardless of the cause.

Tool validity and reliability: The present study tool was handed to three juries who are academic nursing experts in the Obstetrics & Gynaecological Nursing and Community Health Nursing field to test the face and content validity of the tools; necessary modifications were carried out based on their judgment on clarity of sentences and the appropriateness of the content. Tool reliability was tested using internal consistency methods (Alpha Cronbach's test for knowledge, attitude and health seeking behaviors, its result was (0.88, 91.0 and 87 respectively) which indicates good reliability of the tool.

Pilot study:

It was carried out on 10 % of the total subjects (40 women) who met the criteria of selection were included in the pilot study in order to assess the feasibility and the

clarity of the tool and determine the needed time to answer the questions. Based on its result, minimal changes were carried out (such as delete duplicated sentences that give the same meaning and rephrasing some unclear sentences). The sample included in the pilot study was excluded from the study sample

Field work: -

Data was collected through a period of 6 months from the beginning of April 2017 to the end of September 2017, two days/week from 9.00 a.m. to 12.00 p.m. Each woman was interviewed to complete the questionnaire. Researchers met the women, asked them the questions in Arabic and recorded their answers in sheet. The interview was carried out in the waiting area at the previous mentioned outpatient clinic and it took about 30 minutes for each one.

Health promotion instructions were developed by the researchers after extensive review of related literature. For ethical reasons thought it was not intended in the research, these developed health promotion instructions were distributed to the studied women after filling the questionnaire. The objective of these instructions was to help women to improve their knowledge, and change their unhealthy behavior to cope with menopausal stage.

Statistical analysis: Data was collected and analyzed by computer program SPSS version 21. The qualitative variables were presented in tables as numbers and percentage; the figures used were portrayed in bars for qualitative variables and analyzed by Chi-square test. A p-value < 0.05 was considered to be statistically significant. The quantitative variables are presented as mean \pm SD. Correlation coefficient was applied by using r-Pearson test to identify the factors which can have an effect on the level of knowledge and attitude toward menopause to detect whether there is a positive or negative correlation between variables in same group.

Results:

Table (1) demonstrates demographic characteristics of the study subjects. It was observed that (58.0%) of them their age were between 35-40 years with a mean age **37.21 \pm 6.11**. Regarding level of education, it was noticed that (30.0%) of them read and write followed by 37% & 20 % had primary and secondary level of education respectively. According to women' occupation, (94%) of them were housewives, 88.5% of them were married, and 86% were living in rural areas.

Table (2) represents percent distribution of studied women according to their knowledge about menopause and showed that (90%) of them know that menopause is a natural phenomenon and (95%) of them define menopause as stopping of menstruation suddenly. Moreover, 85% recognizes that most of the women experience hot flashes in the menopausal period and (78%) reported that the level of stress and depression feelings increases in menopausal women. It was noted that (67.0 % & 57 % respectively) reported that hot flashes or abnormal menstrual bleeding were the most common symptoms of menopause. As regards the total score of women' level of knowledge about menopause, it was clear that (85%) had bad scores of the women.

Table (3) shows women' proposed health practices to overcome intensity of menopausal symptoms/complications; to overcome hot flashes, only (40.0%) were informed about avoiding hot and crowded places, however reasonable knowledge were reported concerning reducing the other complications in terms of (drinking one glass of milk before going to bed & (for bones health) (70%). Concerning routine checkups, 88% of the studied women were inform that visiting doctors in case of having bleeding as one of the routine checkup during menopause, however only (11.0% & 8.6% respectively) recommended

breast self-examination, Pap smear and pelvis examination. Concerning their total knowledge related health practices to overcome the intensity of symptoms, (60%) of the studied women had poor level of knowledge, while only (5.0%) had good level.

Table (4) reveals women’s attitude toward menopause and showed that 60% of the studied women agreed that menopause is the period of eradicating the problems of menstruation and preventing pregnancy and 65% of them agreed with the statement (In the menopause period, interest and attention of woman to her husband decreases), while 43% of the studied women disagree with the statement (Menopause is the beginning of the period of women’s disablement). Regarding the statement (Menopause is the beginning of another life and second maturity of women), (62%) of them agreed. The mean score of women attitude toward menopause was (63.80 ± 9.12) and also clarified that (65%) of the studied women had a positive attitude towards menopause.

Figure (1) clarifies that (55.0%) of women reported that their family members were the main source of information about menopause. Other sources of information were T.V (35.0 %), magazine (10.0%), books (6.0%) and Physician (2.0%).

Table (5) reveals a significant positive correlation between women's total level of knowledge and their educational level and occupation in terms of good & fair score for educational level (0.004 & 0.005) respectively, and only good score for women occupation (0.005), however both score (fair & good) were correlated positively with significant difference concerning their attitude.

Table (1): Number and percent distribution of studied women according to their demographic characteristics (N=390)

Item	No.	%
Women ' age in years		
- 35 < 40	226	58.0
- 40 < 45	164	42.0
- Range	35 - 44 years	
- Mean ± SD	37.21 ± 6.11	
Women ' education		
- Illiterate	35	9.0
-Read and write	117	30.0
-Primary education	144	37.0
-Secondary education	78	20.0
-University education	16	4.0
Women ' occupation		
-Employee	23	6.0
-House wife	367	94.0
Women ' marital status		
-Single	12	3.0
-Married	345	88.5
-Divorced	17	4.5
-Widowed	16	4.0
Residence		
-Rural	335	86.0
-Urban	55	14.0

Table (2): Number and percent distribution of women according to their knowledge level about menopause (N=390)

Items	No*	%
Menopausal definition		
- Menopause is a natural phenomenon	351	90
- Menopausal age is occurred between 48–55 years	156	40
- Menopause is stopping of menstruation suddenly	370	95
- Irregular menstruation is the sign of beginning of the menopause period	117	30
- Factors that can make a woman to reach menopause earlier?	39	10
- What can make a woman to reach menopause earlier than usual	8	2
- During 1 year after complete stop of menstruation, pregnancy prevention is necessary	195	50
- Menopause symptoms are preventable and curable	78	20
Menopausal Symptoms		
- Hot flashes	261	67.0
-Vaginal dryness	42	11.0
-Painful intercourse	23	6.0
-Difficulty concentrating	42	11.0
-Depression	24	6.0
-Headache	31	8.0
-Memory loss	39	10.0
-Feeling as if insects are crawling all over my skin	24	6.0
-Lower backache	24	6.0
-Sweating during the night (night sweats)	27	7.0
-Urinary problems	19	5.0
-Weight gain	78	20.0
-Mood swings	58	15.0
-Heart palpitations	42	11.0
-Irregular menstruation and bleeding	222	57.0
- Other:		
Recurrent fatigue	19	5.0
Exhaustion	12	3.0
Menopausal physical and psychological symptoms		
- Backache is the main cause of vertebra bone fracture	97	25
- The skin of menopause women gets thick and wrinkled	218	56
- Most of the women experience hot flashes in the menopause period	331	85
- Menopause causes urinary frequency and dysuria	58	15
- Intercourse in menopause women is painful	78	20
- Menopause in women increases weight	144	37
Long term menopausal complications of estrogen deficiency		
- Menopause women have sleep disorders	66	17
- Diabetes is more common during menopause period	78	20
- Heart diseases are more common during menopause period	15	4
- Sexualities change in menopause women	19	5
- The level of stress and depression feelings increases in menopause	304	78

women		
- Bones are fragile during the menopause	20	5
- Menopause causes osteomalacia in women	62	16
- Menopause in women decreases genital infections	132	34
- Menopause causes vaginal dryness and painful sexual intercourse	97	25
- Menopause affects the power of concentration and memory of women	222	57
- Menopause causes dryness and skin shrivel in women	183	47
- Menopause causes different types of cancer in women	90	23
Total score of knowledge level	No.	%
- Bad <"50 "	331	85.0
- Fair "50- 65"	59	15.0
- Good">"65"	0	0.0.0

**More than one answer was reported so the total number may exceed the total number of participants (390)*

Table (3): Proposed health practices to overcome intensity of menopausal symptoms (N=390)

Items	Informed		Not Informed		Don't know	
	N	(%)	N	(%)	N	(%)
a. For reducing hot flashes						
1. Avoid eating hot and spicy meals	97	25.0	156	40.0	137	35.0
2. Avoid hot and crowded places	172	44.0	103	26.4	115	29.5
3. Wearing several thin shirts in winter	58	15.0	293	75.0	39	10.0
4. Having deep breathes during hot flashes	129	33.0	183	47.0	78	20.0
b. Reducing the other complications						
1. Drinking one glass of milk or yogurt before going to bed	273	70.0	35	9.0	82	21.0
2. Adequate sleep and daily activities	242	62.0	90	23.0	58	15.0
3. Study and mediation (improving the memory)	0	0.0	0	0.0	390	100.0
4. Applying lubricating creams during intercourse (to reduce dyspareunia)	39	10.0	156	40.0	195	50.0
5. Regular exercising (for bones health)	32	8.2	314	80.4	44	11.4
6. Taking calcium tablet or syrup (for bones health)	141	36.0	125	32	124	32.0
7. keeping a suitable weight to decrease developing heart disease	218	56.0	117	30.0	55	14.0
c. Routine checkups						
1. Breast self-examination	43	11.0	308	79.0	39	10.0
2. General medical examination (every 5 years)	7	1.8	321	82.3	62	15.9
3. Pap smear and pelvis examination	33	8.6	264	67.7	92	23.7
4. Visiting doctors in the case of having bleeding	343	88.0	27	7.0	20	5.0
Total score of prventive health practice level	No		%			
- Bad <"50 "	334		60.0			
-Fair "50- 65"	136		35.0			
-Good">"65"	20		5.0			

Table (4): Number and percent distribution of women' attitude toward menopausal symptoms (N=390)

Items	n=390							
	Complete agree (4)		Agree (3)		disagree (2)		Complete disagree (1)	
	No	%	No	%	No	%	No	%
1-Menopause is the period of woman's loneliness	97	25	156	40	117	30	20	5
2-Menopause is the period of eradicating the problems of menstruation and preventing pregnancy	97	25	234	60	47	12	12	3
3-Woman's menopause decreases husband's sexuality	74	19	195	50	109	28	12	3
4-Every woman can care for herself through training and necessary tendency	113	29	148	38	94	24	35	9
5-In the menopause period, interest and attention of woman to her husband decreases	12	3	253	65	86	22	39	10
6-Menopause is the beginning of the period of women's disablement	117	30	15	4	168	43	90	23
7-Menopause decreases the grace of woman's appearance	101	26	210	54	74	19	35	9
8-Menopause is a usual and natural phenomenon in women's life	90	23	195	50	90	23	15	4
9-Woman's life in the menopause period is more delightful than before menopause	148	38	183	47	23	6	12	3
10-Menopause is the beginning of another life and second maturity of women	39	10	242	62	74	19	35	9
Total score of women ' level of attitude	Mean ± SD (63.80 ± 9.12)							
	No				%			
-Negative attitude <"50 "	136				35.0			
-Positive attitude (≥50%)	254				65.0			

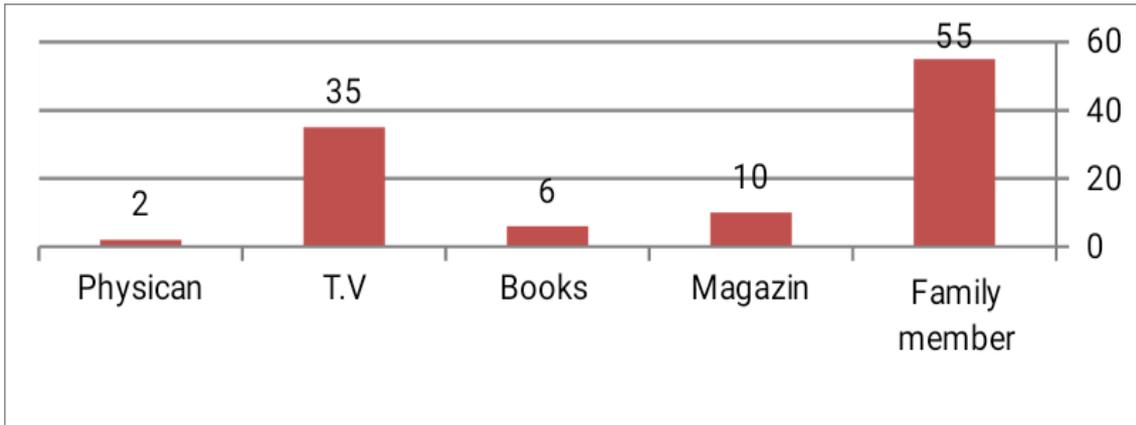


Figure (1): Sources of women' knowledge about menopause

Table (5): Correlation between demographic characteristics and total level of knowledge and attitude about menopause among studied women (No=390)

Demographic characteristics	Total Score level of knowledge/Attitude					
	Bad		Fair		Good	
	r	P	r	P	r	P
- Women ' age in years	0.036 0.036*	0.814 0.814*	---	---	---	---
- Women ' education	---	---	0.242 0.242*	0.004 0.004*	0.411 0.411*	0.005 0.005*
- Women ' occupation	---	---	---	---	0.451 0.5*	0.005 0.001*

*Total Score level of attitude toward menopause

Discussion

Menopause has substantial effect on women’s quality of life, as keeping women healthy throughout this period and being active will benefit not only herself but also makes sound socially and economically for that preventive interventions can help reduce the costs of long-term care for chronic conditions. **(Mujahid et al 2013 &WHO 2009)** Therefore, it is important that women especially those not approaching menopause realize these changes and better equipped to take care of their needs once reached this age and to be able to postpone or prevent those risks. **Mujahid et al & Bakouei et al (2013)** However, few studies have been investigated the age period before menopause concerning awareness and attitudes of those younger women toward the menopause and the preventive practices used to avoid intensity of menopausal symptoms. **Cheng et al (2005)**

This study had been conducted to shed the light on awareness of young women about menopause, their attitudes and their knowledge concerning preventive health practices to alleviate menopausal symptoms and to find out the interfering factors. These data may draw attention to their level of awareness concerning menopause to equip them how to be well prepared and manage it properly once get hold of.

Regarding the level of knowledge about menopause, It has been proposed that lack of knowledge concerning menopause makes women more worried when it is time to deal with menopause and this has negative effects on their emotional state **(Thomas, 2005; Sajatovic, 2006)**. The present study showed that less than one fifth of the women had heard and had knowledge about menopause and more than three fourths of them categorized as bad score level of knowledge, this result was consistent with the results conducted in Iran and Tehran and showed that women’s knowledge about menopause is weak, and in agreement with **Patel et al, (2014) & Elkazeh et al (2015)** who found that women had insufficient information about menopause and they need to be encouraged to participate in health educational program to increase their knowledge and also in line with results reported by **More et al (2018)** who found that majority of women did not have any knowledge about menopause. This means to put great emphasis on implementation of educational programs especially for those not approaching menopause to improve the management of menopausal symptoms before starting, rather than managing it at the time

of menopause. However, on the other hand, the results conducted in developed countries in USA, **Sharps et al (2003)**, reported that the knowledge level about menopause was good.

As regards the knowledge of young women about symptoms of menopause, such as hot flashes or abnormal menstrual bleeding, it was high as more than two thirds and more than one half knew about both of them, on the other hand, knowledge about other menopausal symptoms such as vaginal dryness and painful intercourse, night sweats, headache and urinary problems was low, These results were in accordance with the results conducted by **Ensieh et al (2014) Anjum et al (2013) & Rahman et al (2010)** who noted that women's knowledge about symptoms of menopause, such as hot flashes or abnormal menstrual bleeding, was high. This finding may be explained as more than half of the studied women received their information about menopause from their families and the vast minorities received it from the physician adding to that the majority had only basic education, housewives and resided in rural areas. This result was in the same line with results conducted by **Elkazeh et al (2015)**

As self-care practices represent an important role in managing menopausal symptoms. **(Anitha, 2005)** Several studies confirmed this finding and displayed that women can overcome and reduce more adverse emotional and psychological symptoms of menopause by educating themselves about menopause to better prepare them when approaching this stage of life cycle. These results encourage us to first identify the knowledge background of young women who aren't approaching menopause toward the preventive health practices to avoid severity of menopausal symptoms. In this respect the present study delineated that nearly two thirds of them had bad score concerning the knowledge about preventive health practices. In spite of nearly two thirds of them were familiar that hot flushes represent one of the major symptoms that marked menopause, they didn't have reasonable information about how to overcome this symptom. Also, most of them had no idea about other measures that relieve dyspareunia or even make regular pelvic checkup as Pap smear or breast self-examination. These findings may be attributed to that the sample taken from the Upper Egypt, in which their culture is highly conservative, moreover the majority of women were housewives, resided in rural areas and the vast minority of them had higher education level. This issue shades the light on the importance to better equip them especially those young women with low education level and in rural areas when approaching this stage of life cycle. As knowing more about menopause might enable women to cope better with menopausal changes. **Wong and NurLiyana (2007)**

In spite of having low knowledge about menopause and its preventive health practices, it is observed that more than two thirds of women had positive attitude toward menopause, this result was in agreement with **Ensieh et al (2014)** who found that the majority of women had positive attitude and only less than one fifth had a negative attitude toward menopause. On the other hand, results of the current study were in disagreement with that conducted by **Kim et al (2014)** who emphasized that loss of sexuality and appeal are the main factors precipitate negative attitude towards menopause among women. This finding may be attributed to that most of the studied women in the current study had low awareness concerning menopause and they received information from their relatives and other issues concerning sexuality during the menopause not discussed openly in Arabian cultures especially those living in rural areas. **(Jamali et al, 2016)** In this respect, **Ayers et al (2010)** noted that women with a positive attitude towards menopause tended to view this change as a natural life process and transition.

There are few studies which have investigated the age period before menopause to have efficient database concerning awareness and attitudes of those younger women not approaching the menopause toward the menopause, the preventive practices used to avoid intensity of menopausal symptoms and its relation to their demographic factors. **Cheng et al (2005)**

WHO, 2009 emphasized that the health of women is critically affected by social and economic factors, such as access to education, household wealth and place of residence. In this respect the findings of collected data portrays a significant positive correlation between total level of women knowledge about menopause and its preventive health practices and their level of education and occupation. This result was in accordance to **Bakouei et al (2013)** who mentioned that the awareness level in women with higher education levels was significantly higher than those with low education (illiterate, primary school, and secondary school) also, the current result was supported by **Loutfy et al, (2006)** who studied women's perception and experience of menopause, a community-based study in Egypt and found that most menopausal women with previous knowledge about menopause were among professional occupation, this may be attributed to that those who have professional occupation have good educational level and when they are complaining from any problem they consult a doctor and getting more information about it.

Furthermore a significant positive correlation between women's total level of attitude toward menopause and their education level and occupation, these results were in the same line with **Najafabadi et al (2015)** who studied association between perceived social support and depression in postmenopausal women and found that there was a significant relationship between age, educational level, job status, and menopause. However contradicting the present study in only the age factor constitutes no correlation for both knowledge and attitude. Also **Çoban et al (2008)** and **Jassim & Al-Shboul (2008)** found in their studies that there was a relation between women attitude about menopause and their educational level, and **Gazang and Jwan (2012)** & **Eun et al (2014)** reported the same finding. This finding may be attributed to the assumption mentioned by **Serena et al (2009)** who studied women's knowledge, attitude and practice regarding menopause and reported that education is greatly strengthens the women's knowledge and practices and improve their attitude toward menopause and creating a healthy environment so lack of knowledge was associated with women's low educational level.

Establishing healthy habits at younger ages can help women to live active and healthy lives well until being in old age. Preventive interventions need to be targeted at younger women as much as, if not more than, at older women. **(WHO, 2009)**

As a first step towards educating women about different aspects of menopause is to have insight of their awareness, attitude about menopause and being aware of various preventive measures to overcome intensity of menopausal symptoms. So the researchers select those women during the reproductive age to prepare them with the important knowledge once ingoing the menopause. As knowing more about menopause might empower women to cope better with menopausal changes. **Elkazeh et al (2015)**

Conclusion

The current study concluded that while attitude of most of the women about menopause was positive, the total knowledge score of women about the menopause and preventive ways to overcome symptoms was poor, most of their sources of information were relatives, however, the physician represented the vast minority. The demographic data in terms of

education and occupation have an effect on knowledge and preventive practice of menopausal symptoms as it correlated positively.

Recommendations:

Based on the results of the current study, the following recommendations are proposed: -

- The findings of the present study highlights the need to strengthen health systems represented in nurses so that they are better geared to meet young women's needs – in terms of giving them relevant information and the proper preventive health practices so they will manage menopausal symptoms appropriately.
- Counseling activities of premenopausal women need to be generalized.
- It is important to encourage cooperation between educational institutions, medical care providers and the health personnel to educate women about menopause, its symptoms, long term consequences and treatment options that may be combined by educational programs and health care providers that will help in increasing awareness.

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References

1. **Anitha KA (2005):** Study to assess the Prevalence of Menopausal Problems and Preventive Health Behaviours of Selected Groups of Women in Raichur. Master degree in obstetrics and gynecology nursing. Navodaya College of Nursing .Rajiv Gandhi University of Sciences Karnataka, Bangalore.
2. **Anjum F., Ghayas S., Jahan N. and Yasin H. (2013):** Awareness and perception of menopause in Pakistani women. *World Journal of Pharmacy and Pharmaceutical Sciences*, 2(2):429-36.
3. **Ayers B, Forshow M, & Hunter M. S.(2010):** The impact of attitudes toward the menopause on women's symptom experience: A systemic review. *Maturitas*. ; 65(1):28–36.
4. **Bakouei F., Basirat Z., Salmalian H., Omidvar S. and Bakouei S. (2013):** Assessment of women's awareness level about symptoms and complications of menopause and methods to their prevention. *Journal of Local and Global Health Science*, 3:6. <http://dx.doi.org/10.5339/jlqhs.2013.6/10.5339/jlqhs.2013.6>
5. **Blümel JE, Chedraui P, Baron G, Belzares E, Bencosme A, & Calle A,. (2012):** Menopausal symptoms appear before the menopause and persist 5 years beyond: A detailed analysis of a multinational study. *Climacteric*; 15:542-51.
6. **Cheng MH, Wang SJ, Wang PH, Fuh JL. 2005:** Attitudes toward menopause among middle-aged women: a community survey in an island of Taiwan. *Maturitas*; 52:348–355.
7. **Çoban A., Nehir S., Demirci H., Özbaşaran F., İnceboz U. (2008):** The impact on menopausal symptoms of marital adjustment and attitude toward menopausal of married women in the climacteric period. *Firat University Medical Journal of Health*; 22: 343–349.
8. **Dienye PO, Judah F, Ndukwu G. (2013):** Frequency of symptoms and health seeking behaviours of menopausal women in an out-patient clinic in Port Harcourt, Nigeria. *Glob J Health Sci*; 5:39-47.
9. **Elkazeh E, Abo Elghite E, El-Zeftawy A & Mohamed A (2015):** Knowledge of Women in Reproductive Age about Menopausal Problems and Preventive Health Behaviors in Tanta

City, Al -Gharbyia Governorate, Egypt; *IOSR Journal of Nursing and Health Science (IOSR-JNHS)* e-ISSN: 2320–1959.p- ISSN: 2320–1940 Volume 4, Issue 3 Ver. II (May. - Jun. 2015), PP 51-63 www.iosrjournals.org

10. **Ensieh N., Nayereh K., Ahmad A., Akbar H., Soheila D. (2014):** Knowledge and attitude toward menopause phenomenon among women aged 40–45 years
11. **Eun K, Hyun S, and Nam M. (2014):** Menopause Knowledge, Attitude, Symptom and Management among Midlife Employed Women. *J Menopausal Med.* 2014 Dec; 20(3): 118–125. doi: [10.6118/jmm.2014.20.3.118](https://doi.org/10.6118/jmm.2014.20.3.118)
12. **Ford K., Sowers M., & Crutchfield M., (2011):** Longitudinal study of the predictors of prevalence and severity of symptoms commonly associated with menopause. 12: 308-317. <http://dx.doi.org/10.1097/01.GME.0000163869.89878.D9>
13. **Gazang N. and Jwan M.: (2012):** Perception and Experience Regarding Menopause among Menopausal Women Attending Teaching Hospitals in Erbil City, 2012; 11: 159–66.
14. **Jassim G., Al-Shboul Q. (2008):** Attitudes of Bahraini women towards the menopause: implications for health care policy. *Maturitas*; 59: 358–372.
15. **Kim M., Cho J., Ahn Y., Yim G., Park H. (2014):** Association between physical activity and menopausal symptoms in perimenopausal women. *BMC Womens' Health*: 14:122.
16. **Loutfy I, Abdel Aziz F, Dabbous N. I, Hassan M. H. A. (2006):** Women's perception and experience of menopause: a community-based study in Alexandria, Egypt. *East Mediterr Health J*; 12(Suppl 2):S93–106.
17. **McNamara M, Batur P, DeSapri KT.** *Ann Intern Med.* 2015 Feb 3;162(3):ITC1-15. doi: [10.7326/AITC201502030](https://doi.org/10.7326/AITC201502030). Review.PMID:25643316
18. **More S, Sujatha P, & Karthiga, (2018):** Knowledge, attitude and experiences of menopause in the postmenopausal women at a tertiary care center: a cross sectional study. *Int J Reprod Contracept Obstet Gynecol*; 7:4758-61.
19. **Mujahid S, Siddiqui AA, Hussain R. 2013:** Awareness of Menopausal Symptoms among Young Pakistani Women of Different Educational Backgrounds. *J South Asian Feder Menopause Soc*; 1(1): 18-20.
20. **Mustafa GN & Sabir JM. (2012):** Perception and Experience Regarding Menopause among Menopausal Women Attending Teaching Hospitals in Erbil City. *Global Journal of Health Science.* May; 4(3): 170–178.
21. **Najafabadi M., Kalhori H., Javadifar N., Haghhighizadeh M. (2015):** Association between Perceived Social Support and Depression in Postmenopausal Women. *Jundishapur J Chronic Dis Care*, 2015; 4: 12-17.
22. **Noroozi E, Dolatabadi NK, Eslami AA, Hassanzadeh A, Davari S. (2013):** Knowledge and attitude toward menopause phenomenon among women aged 40-45 years. *J Educ Health Promot.* 2:25. [[PMC free article](#)] [[PubMed](#)]
23. **Patel V., Koshy S., Ravindra H. (2014):** Effectiveness of structured teaching programme on knowledge regarding menopausal symptoms and its management among women. *IOSR J Nurs Health Sci*; 3: 22-6.
24. **Rahman S., Zainudin S., and Kar V. (2010):** Assessment of menopausal symptoms using modified Menopause Rating Scale (MRS) among middle age women in Kuching, Sarawak, Malaysia. *Asia Pacific Family Medicine*, 9:5.
25. **Jamali S, Shohreh J, Mosalanejad L, and Razieh (2016):** Attitudes about Sexual Activity among Postmenopausal Women in Different Ethnic Groups: A Cross-sectional Study in Jahrom, Iran; *J Reprod Infertil.* Jan-Mar; 17(1): 47–55.

26. **Sajatovic M, Friedman S, Schuermeyer I, (2006):** Menopause knowledge and subjective experience among pre- and postmenopausal women with bipolar disorder, schizophrenia and major depression. *J Nerv Ment Dis.*194 (3): 173-8.
 27. **Sallam H., Galal A., and Rashed A. (2006):** Menopause in Egypt: past and present perspectives, *The Suzanne Mubarak Regional Center for Women's Health and Development, Egypt*, 9 (6): 421-429.
 28. **Serena D, Rodolfo C, Paola M, Roberto S, Cinzia C, Alessandro L, Mele A (2009):** Menopause: Knowledge, attitude and practice among Italian women. *Maturitas.* 63:246–252. [[PubMed](#)] [[Google Scholar](#)]
 29. **Sharps PW, Phillips J, Oguntimalide L, Saling J, Yun S. 2003:** Knowledge, attitude, perceptions and practices of African-American women toward menopausal health. *J Natl Black Nurses Assoc.*; 14:9–15. [[PubMed](#)] [[Google Scholar](#)]
 30. **Shilpa K & Amit RU (2015):** A comparative study on postmenopausal symptoms in rural and urban women. *Int J Community Med Public Health* 2015; 2:604-9.
 31. **Simarjeet K, Vandana V and Patial N, 2018:** Assessment of knowledge of menopausal women regarding menopause: A descriptive study; *International Journal of Applied Research*; 4(4): 347-351
 32. **Sugunadevi G,& Divya B V; (2018):** Health education program about postmenopausal changes to perimenopausal women in an urban slum area, Coimbatore, *International Journal of Medical Science and Public Health* 2018 | Vol 7 | Issue 3 page 193-97)
 33. **Tanira S, Wazed F, Sultanba A, Amin R, Sultana K, Ahmad S. (2009):** Knowledge, attitude and experience of menopause. An urban based study in Bangladesh. *Journal of Dhaka Medical College*; 18 (1): 33-36
 34. **Thomas S (2005):** Menopause knowledge and attitudes of English-speaking Caribbean women: implications for health education. *Californian Journal of Health Promotion*, 2005; 3(2):167-76.
 35. **Tosson MM, Elsayed A, & Labeeb SA (2014):** Assessment of Women Knowledge and Attitude toward Menopause and Hormone Replacement Therapy (HRT) in Assiut University Hospital. *Journal of American Science*; 10 (12).
 36. **Wong L. and NurLiyana A. (2007):** A Survey of Knowledge and perception of menopause among young to middle aged women in federal territory, Kuala Lumpur, Malaysia. *JUMMEC*, 10 (2):22-30.
- World Health Organization (WHO), 2009:** Women and health: today's evidence tomorrow's