

Knowledge of Women in Reproductive Age about Menopausal Problems and Preventive Health Behaviors in Tanta City, Al -Gharbyia Governorate, Egypt

Entisar Abo Elghite Elhossiny Elkazeh¹ and Amaal Mohamed Ahmed El-Zeftawy²
Assistant professor¹ and Lecturers² in Community Health Nursing Department, Faculty of Nursing,
Tanta University, Egypt.

Abstract:

Background: Women in her lifecycle go through pre, peri and post menopausal phases. The timing of menopause, perception as well as menopausal symptoms varies between populations and within populations.

Aim of the study: - to assess knowledge of women in reproductive age about menopausal problems and preventive health behaviors in Tanta city, Al -Gharbyia Governorate, Egypt. **Materials and methods:** - An analytic cross- sectional study was used. The study was carried out in three MCH centers of Tanta city; El-Embaby, Cigar and Boutros health centers as these centers are the biggest centers. The study sample was chosen as a systematic random sample, where as one woman was interviewed every 3rd woman from those attending the MCH centers, their ages ranged from 15 years to 49 years old, where their number was 300 through the study period. A structure interview questionnaire sheet was used to collect the necessary data. **Results:** - More than two thirds of the studied women (72%) had poor level of knowledge about symptoms and signs of menopause, and two thirds of them (66%) had also poor level of knowledge about onset and causes of menopause. Whereas (47.3% and 35% respectively) of the studied women had poor level of knowledge about preventive health behavior, management and concept of menopause. **Conclusion and recommendation:** - There was negative correlation between studied women knowledge about menopause and their total level of knowledge about health problems of menopausal women ($p < 0.05$), but there was positive correlation between their total level of knowledge and preventive health behaviors ($p < 0.05$). Counseling activities of premenopausal, menopausal and post menopausal women need to be popularized and facilities and decision aids made available to those who need them.

Keywords: - Knowledge, Premenopausal women, Menopause, Reproductive age, preventive health behaviors.

I. Introduction

The menopause is a transitional developmental period in a women's life ⁽¹⁾. The World Health Organization (WHO) defines menopause as 'the permanent cessation of menstruation as a result of the loss of ovarian activity' ⁽²⁾. Natural menopause is recognized after 12 months or more of amenorrhea that is not associated with a pathologic cause and it is a normal physiological change experienced by middle age women ⁽³⁾. Although menopause is a universal phenomenon, there is a considerable variation among women regarding the age of attaining menopause and the manifestation of menopausal signs and symptoms. Worldwide, the estimates for the median age at menopause range from 45 to 55 years ⁽⁴⁻⁶⁾. It is generally accepted that the average age at menopause is about 51 years in industrialized countries, but data are inconsistent for the developing world because of methodological problem (WHO, 1996) ⁽⁷⁾.

In 1960, the world population of women aged over 60 was below 250 million, but it is estimated that in the year 2030, 1.2 billion will be peri or postmenopausal and that this total will increase by 4.7 million a year. The average woman in the developed world can now expect to spend approximately one third of her life in postmenopausal state ⁽⁸⁾. The mean age of the menopause in Egypt is 46.7 years, which is low compared to many countries, but this age has been rising in the past few years in the west, probably because of the different 'socio-cultural attitudes' towards the menopause in different communities. The western woman attitude towards the menopause is generally positive and about one third of them considers the menopause as 'a normal physiological change'. Nevertheless, the Egyptian women need an awareness campaign about menopause in order to educate them about this important stage of their lives ⁽⁹⁾.

Menopause is a unique stage of female reproductive life cycle ⁽¹⁰⁾. The quality of life of women varies significantly on the menopausal status. Symptoms experienced during menopause affect the quality of life in postmenopausal women. Menopause signals a transition from the reproductive stage to the non reproductive stage in a woman's life. The common climacteric symptoms experienced by them can be grouped into: vasomotor, somatic, 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 has been established^(3,11).

Hormonal changes at menopause are associated with numerous physical and psychological symptoms like vasomotor symptoms, sleep disturbances, mood alteration, depression, urinary tract infection, vaginal atrophy and increased health risks for several chronic disorders including osteoporosis cardiovascular disease and loss of cognitive function⁽⁸⁾. A perception of the menopause as a positive event varies in different countries between 60%-90 %^(9, 12, and 13). And menopausal symptoms are found to be less common in societies where menopause is viewed as positive rather than negative event⁽¹⁴⁾. The prevalence and severity of climacteric symptoms varies widely from individual to individual in the same population and also from population to population^(3, 11).

All women have more or less similar hormonal changes with menopause. The experience of each women is unique and is influenced by age, cultural back ground, health, type of menopause (spontaneous or surgical, child bearing desires and relationships). Women may view menopause as a major change in their lives either positive such as freedom from troublesome dysmenorrhea or the need for contraception or negative such as feeling "old" or loss of child bearing possibilities. Other women feel that the menopause brings a cessation of sexual pleasure^(8-11, 15, 16). These apprehensions are far from the truth that the menopause may be considered an end to a women's fertility, but certainly not to her virility⁽¹⁵⁾.

Variety of therapy including hormone replacement can be used to treat these conditions. The use of hormonal therapy and other treatment should be individualized and fully discussed with each patient. Self care practices are having an important place in the management of menopausal symptoms⁽¹⁵⁾. Studies revealed that Women may avoid and reduce many adverse emotional and psychological symptoms of menopause by educating themselves about menopause to better equip them when approaching this stage of life cycle. Knowing more about menopause might empower women to cope better with menopausal changes. It has been suggested that lack of knowledge regarding menopause makes women more frightened when it is time to deal with menopause and this has negative effects on their emotional state. Changing women's perceptions on menopause by increasing their knowledge on menopause may cause less emotional disturbance⁽¹⁷⁻¹⁹⁾. As nursing personnel the understanding women before, during, and after the menopause is an important factor in the assessment their needs. As a first step towards the education of women on different aspects to menopausal symptoms and problems, one should have the insight of their problems and its preventive measures. So the researchers choose the women in reproductive age to equip them with the important knowledge when entering the menopause. Hence the researchers felt the need to assess knowledge of women in reproductive age about menopausal problems and preventive health behaviors in Tanta city, Al -Gharbyia Governorate, Egypt.

Aim of the study:

The aim of the present study was to assess knowledge of women in reproductive age about menopausal problems and preventive health behaviors in Tanta city, Al -Gharbyia Governorate, Egypt.

Research questions

- 1- What are the common health problems of menopause?
- 2- What are the preventive health behaviors of menopause?
- 3- Is there a significant association between socio-demographic characteristics of the women and their preventive health behaviors about menopausal problems?

Materials and Methods

Study design:

An analytic cross- sectional study was conducted in this study.

Settings of the study:

The study was carried out in Maternal and Child Health centers in Tanta city, (the first one is Boutros MCH center, the second is Ciggar MCH center and the third is El-Embaby), these centers were selected because they are the biggest MCH in Tanta.

Subjects:-

The study sample was chosen as a systematic random sample, where as one woman was interviewed every 3rd woman attending the MCH centers, their ages ranged from 15 years to 49 years old.

All of participants received a full explanation of the objectives of the study before accepting to participate in this work. During the period of the study, three hundred and fifty eight women were interviewed, thirty were interviewed for a pilot study, twenty eight of them were not cooperative and excluded, and the

remaining three hundred (N = 300) who accepted and completed the questionnaire were the total studied population in this study.

They satisfied the following exclusion criteria, they are free from overectomy and hysterectomy.

Tools of the study:-

A structure interview questionnaire sheet: - It included the following parts:-

Part (1):- Socio-demographic data including: age, level of education, occupation, and marital status, age at menarche, crowded index and family size.

Part (2):- This part consisted of checklist with 36 problems (18 physical, 10 psychological and 8 social problems) with the options of "yes" and "no". A scoring system was developed for the items. A score "one" was allotted for each "yes" response and score "zero" was given for the "no" response. The total score of part (2) was 36.

- For the first part, regarding physical problems occurs with menopause, the total right answer equal 18 point. The level of right answer divided into three levels. Poor level range from 1-6, average level range from 7-12, and high level range from 13-18.
- For the second part, regarding psychological problems occurs with menopause, the total right answer equal 10 point. The level of right answer divided into three levels. Poor level range from 1-3, average level range from 4-6, and high level range from 7-10 .
- For the third part, regarding social problems occurs with menopause, the total right answer equal 8 point. The level of right answer divided into three levels. Poor level range from 1-3, average level range from 4-5, and high level range from 6-8.

Total scoring of total levels of the studied subjects regarding menopausal problems had been classified into three categories as follows:-

- Poor knowledge: 1-12 of the total knowledge score.
- Average knowledge: 13-24 of the total knowledge score.
- High knowledge: 25-36 of the total knowledge score.

Part (3):- This part consisted of multiple choice about preventive health behaviors questions (included 3 questions about knowledge of the women about concept of menopause, 3 about its onset and causes, 6 about symptoms and signs, 12 about preventive health behaviors and 5 about management of menopause) with 5 options. Out of five options only one was the right option and the other four were wrong answers. A scoring system was developed for the items. Each correct answer was assigned as score of "one" and wrong answer as score of "zero".

- For the first part, regarding knowledge about concept of menopause, the total right answer equal 3 point. The level of right answer divided into three levels. Poor level =1, average level =2, and high level =3 .
- For the second part, regarding knowledge about onset and causes of menopause, the total right answer equal 3 point. The level of right answer divided into three levels. Poor level = 1, average level =2 and high level =3 .
- For the third part, regarding knowledge about S and S of menopause, the total right answer equal 6 point. The level of right answer divided into three levels. Poor level range from 1-2, average level range from 3-4, and high level range from 5-6 .
- For the fourth part, regarding knowledge about preventive health behavior of menopause, the total right answer equal 12 point. The level of right answer divided into three levels. Poor level range from 1-4, average level range from 5-8, and high level range from 9-12 .
- For the fifth part, regarding knowledge about management of menopause, the total right answer equal 5 point. The level of right answer divided into three levels. Poor level =1 average level range from 2-3, and high level range from 4-5.

The total score of part (3) was 29. The knowledge score of the studied subjects regarding preventive health behaviors to overcome the problems of menopause had been classified into three categories as follows:-

- Poor knowledge: 1-9 of the total knowledge score.
- Average knowledge: 10-19 of the total knowledge score.
- High knowledge: 20-29 of the total knowledge score.

Method

- Before conducting the study, a written permission letter was obtained from the Faculty of Nursing, Tanta University to responsible authorities of the east and west health administrative managers and managers of previously mentioned (MCH) centers.

- **Ethical considerations:** an informal oral consent was obtained and rights, anonymity and confidentiality of the respondents were respected in all phases of the study. All women were informed about the purpose of and the benefits from this study.
- **Developing the tool.** The structured interview questionnaire sheet was developed based on the literature review⁽¹⁵⁾.
- **Validity and reliability of the tools:** The questionnaire was translated into Arabic, and then face and content validity for the Arabic version of the questionnaire was obtained by the five panels of experts in the field (2 experts from community health nursing and 3 experts from obstetrics and Gynecology nursing). All recommended modifications were performed. Cronbach's Alpha revealed high reliability which is .831.
- **A pilot study:** - After obtaining permission from the authorities and subjects, a pilot study was conducted on 30 women. Those women were excluded from the study sample. The purpose of the pilot study was to test the reliability of the tool, clarity and to determine the length of time needed to collect the data from each woman accordingly modification was done.
- **Field work:** - The study was conducted during the period November 2013 to February 2014. Each subject was individually interviewed using the previously mentioned tool. Time consumed for each interview ranges from 25 to 30 minutes. The collected data were categorized, tabulated and made ready for use. The tools of data collection were translated into Arabic by the researchers, tested and verified by bilingual persons.

II. Results

Figure (1) represents distribution of studied women according to their socio-demographic characteristics and family history. It was found that 59.7% of the studied women were in 21-30 age group, 22.7% in 31-40, and 14.3% were in 41-49 age groups. Nearly one third of them (31% and 30.3% respectively) were known to read and write and secondary school and more than one quarter (26.3%) had university education. The most of the studied women (93.3% and 80% respectively) were married and house wife.

Figure (2) demonstrates percent distribution of obstetrical history of studied women. The figure shows that the majority of them (74.7% and 84% respectively) had menarche at age (12-14) and had regular menstruation. As for the parity it was found that more than half of the studied women (50.7%) had a parity of 2to3 followed by Para one (27%) and parity 4to5 (15%), Para 6 and more (4.3%).

Figure (3) represents percent distribution of studied women regarding their knowledge about menopause. The majority of the studied women (74.3%) had heard and had knowledge about menopause and 25.7% of them had not knowledgeable about it.

Figure (4) shows percent distribution of studied women regarding their sources of knowledge about menopause. It was found that knowledge about the menopause was commonly learnt from family members (44%), other common sources of information were watching TV, and scientific magazines and books (35.5% and 15.3% respectively). Only (13.7% and 5%) of the studied women got information about the menopause from medical and health personnel and female magazine.

Figure (5) represents percent distribution of studied women regarding their knowledge about physical problems occurs with menopause. More than seventy percentages of studied women reported that menopausal women were suffering from common physical problems of menopause i.e. feeling of warmth in the body and headache (70.7%). More than sixty percentages of them reported that menopausal women experienced sleep disturbance and body pain (67%) and joint pain (65%). More than fifty percentages of them reported that increase in weight (58%) and dryness of vagina (55%). Whereas more than one third of the studied women reported that rapid heart rate (47%), excessive sweating making the body cool (43%) and very less bleeding (40.3%). The figure also shows that (39.3%, 36%, 34.3%, 33.3% and 31.7%) respectively reported that feeling of suffocation, difficulty in passing stool, numbness of fingers, cold feet and cold hands as physical health problems occur with menopause.

Figure (6) represents percent distribution of studied women regarding their knowledge about psychological problems occurs with menopause. The majority of studied women (73% and 70.3% respectively) reported that losing of femininity (femaleness) and irritability as psychological problems occurs with menopause. While nearly two thirds of them reported that poor concentration, worry about body image and losing control over emotions (67.7%, 62.3% and 61.7%). Whereas (54.7%, 53%, 43.7% and 43% respectively) reported forgetfulness, tiredness, confusion and feeling that something is crawling on the skin. The figure also reveals that only (14%) of studied women reported anxiety as psychological problems occurs with menopause.

Figure (7) regarding percent distribution of studied women regarding their knowledge about social problems occurs with menopause. The figure shows that nearly two third (59.7%) of the studied women reported that cries easy as social problems occurs with menopause and more than half of them (53.3%) reported feels very lonely and also more than one third of them reported (46% , 43.7% and 40.7% respectively) difficulty in sexual intercourse, fear of loosing loved one's and less in interest in sex.

Figure (8) regarding levels of knowledge among studied women regarding problems occurs with menopause. More than half (55.3%) of studied women had poor score of knowledge about social problems occurs with menopause. Whereas (30%) of them had average score knowledge and only (14.7%) of them had high level of knowledge about social problems. The figure also shows that nearly one third (31.7% and 23% respectively) of the studied women had poor level of knowledge about physical and psychological problems occur with menopause but more than one third of them (37%) had high score of knowledge about psychological problems and only (13%) had high score of knowledge about physical problems.

Figure (9) demonstrates percent distribution of studied women regarding their knowledge about the preventive health behaviors of menopausal women. More than two thirds of the studied women (72%) had poor level of knowledge about symptoms and signs of menopause, and two thirds of them (66%) had also poor level of knowledge about onset and causes of menopause and more than one quarter (28.7%) had average level of knowledge. While only (5.5%) had high level of knowledge about onset and causes of menopause. Whereas (47.3% and 35% respectively) of the studied women had poor level of knowledge about preventive health behavior, management and concept of menopause.

Table (1) and (2) represent total level of knowledge among studied women about health problems and preventive health behaviors of menopausal women. The tables show that there was significant difference between total levels of knowledge of studied women regarding health problems and preventive health behaviors of menopausal women ($p < 0.05$).

Table (3) represents correlation among socio-demographic characteristics and total level of knowledge about health problems of menopausal women among studied women. The table shows that there was positive correlation between total level of knowledge of studied women about health problems of menopausal women and their level of education ($f = 6.041$ and $p < 0.05$) but there was no correlation with age and occupation ($p > 0.05$).

Table (4) represents correlation among socio-demographic characteristics and total level of knowledge about preventive health behaviors of menopausal women among studied women. The table shows that there was positive correlation between total level of knowledge of studied women about preventive health behaviors of menopausal women and their level of education and their occupation ($p < 0.05$) but there was no correlation with age ($p > 0.05$).

Table (5) and (6) demonstrate correlation among studied women knowledge about menopause and their total level of knowledge about health problems and preventive health behaviors of menopausal women. There was negative correlation between studied women knowledge about menopause and their total level of knowledge about health problems of menopausal women ($p < 0.05$) but there was positive correlation between their total level of knowledge and preventive health behaviors ($p < 0.05$).

Table (7) represents correlation among total level of knowledge studied women of about preventive health behaviors of menopausal women and total level of knowledge about health problems of menopausal women. The table shows that forty four of studied women had poor score of knowledge about preventive health behaviors and health problems of menopausal women. Whereas ninety four of them had average score of knowledge and only five had high score of knowledge about preventive health behaviors and health problems of menopausal women.

Fig (1): Percent Distribution of Socio-demographic Characteristics of Studied Women.

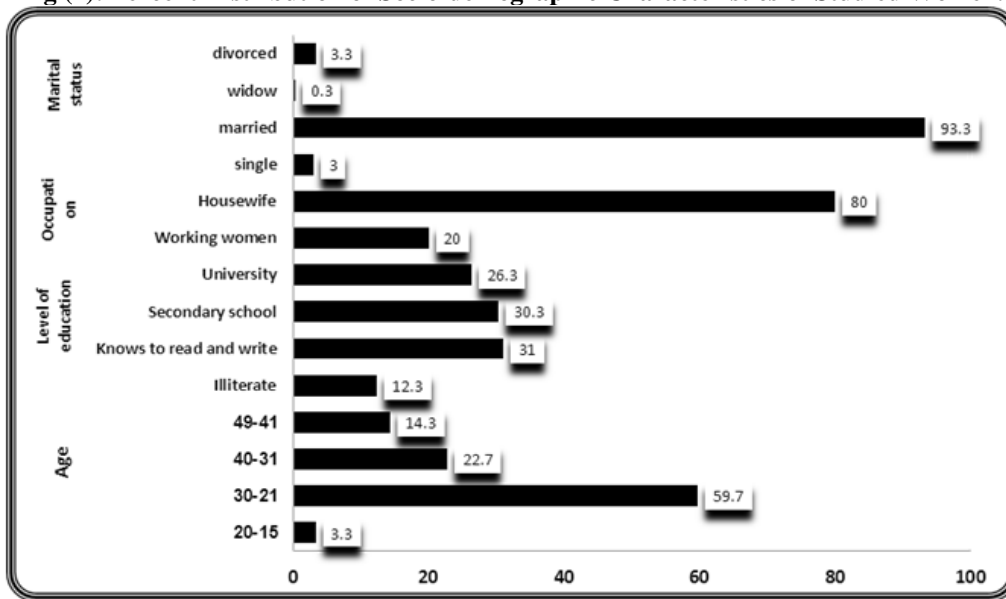


Fig (2): Percent Distribution of obstetrical History of Studied Women.

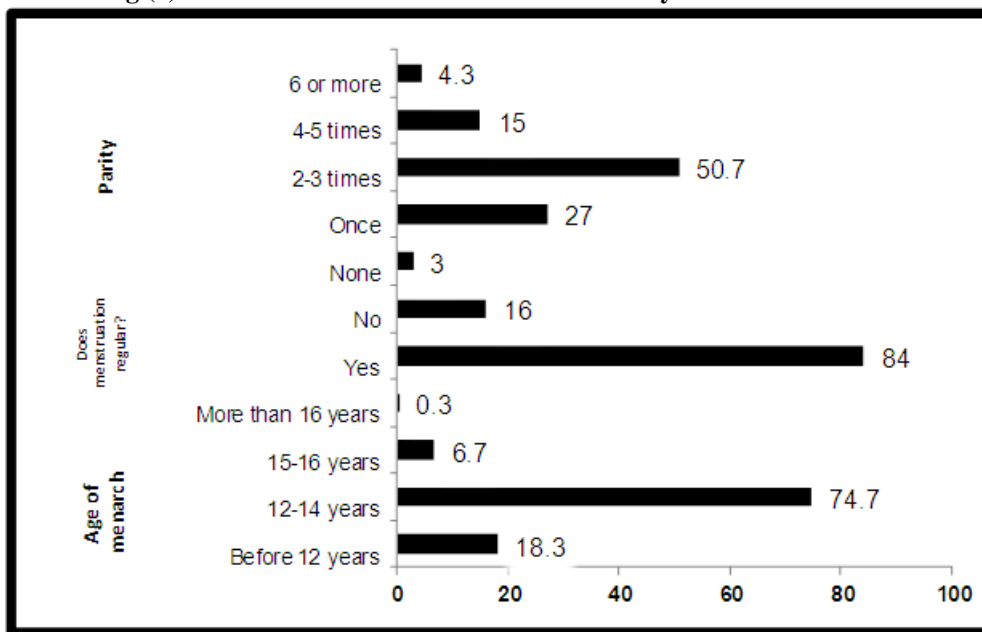


Fig (3): Percent Distribution of Studied Women Regarding their Knowledge about Menopause.

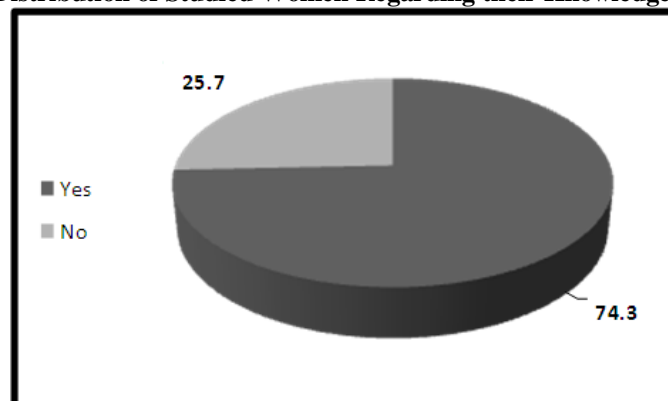
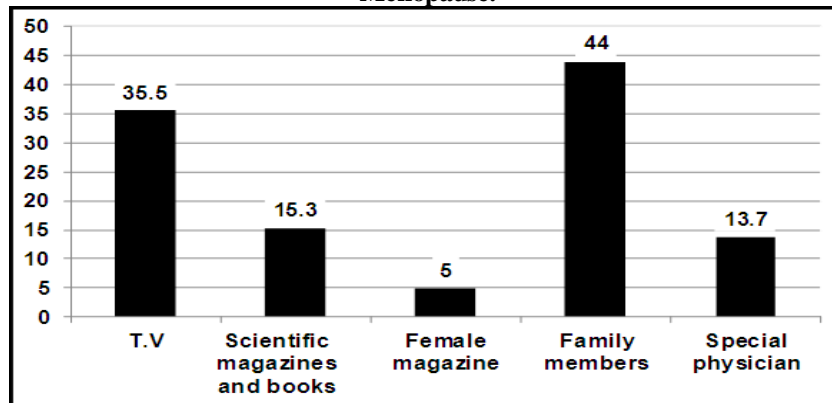


Fig (4): Percent Distribution of Studied Women Regarding their Sources of Knowledge about Menopause.



*More than one answer

Fig (5): Percent Distribution of Studied Women Regarding their Knowledge about Physical Problems Occurs with Menopause.

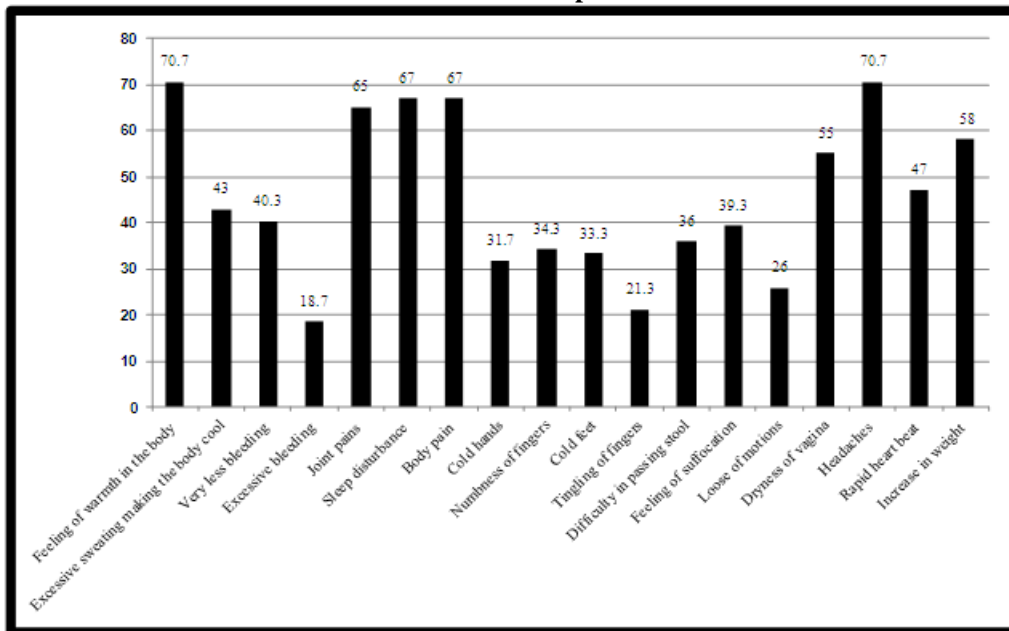


Fig (6): Percent Distribution of Studied Women Regarding their Knowledge about Psychological Problems Occurs with Menopause.

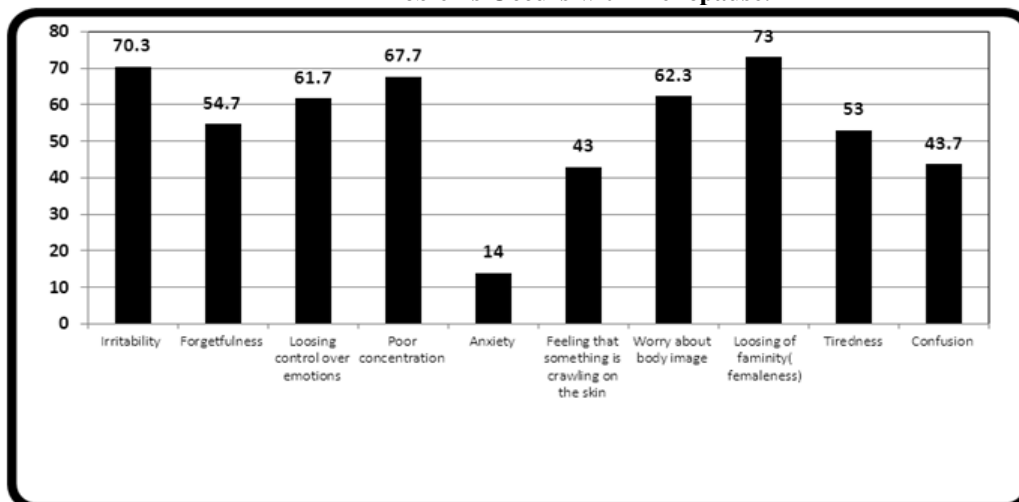


Fig (7): Percent Distribution of Studied Women Regarding their Knowledge about Social Problems Occurs with Menopause.

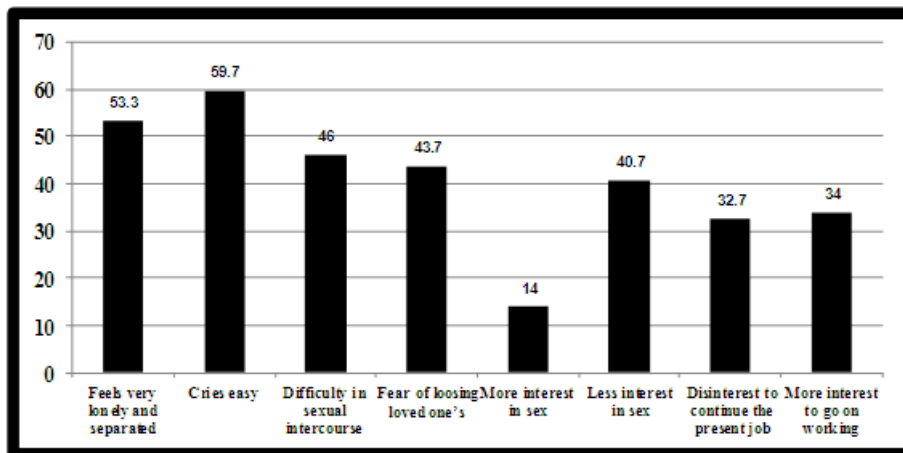


Fig (8): Levels of Knowledge among Studied Women Regarding Problems Occurs with Menopause.

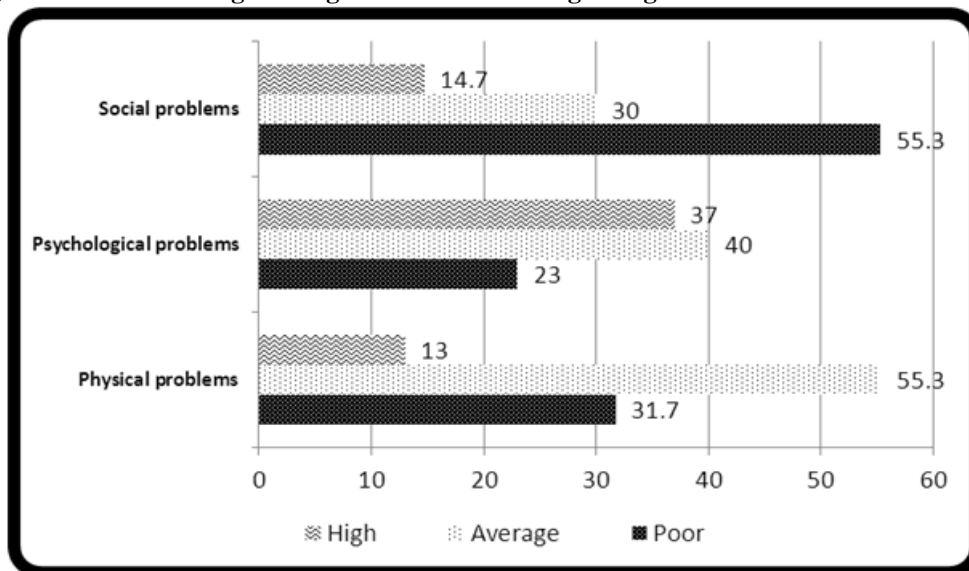


Fig (9) Percentage Distribution of Studied Women regarding their Knowledge about the preventive health behaviors of menopausal women.

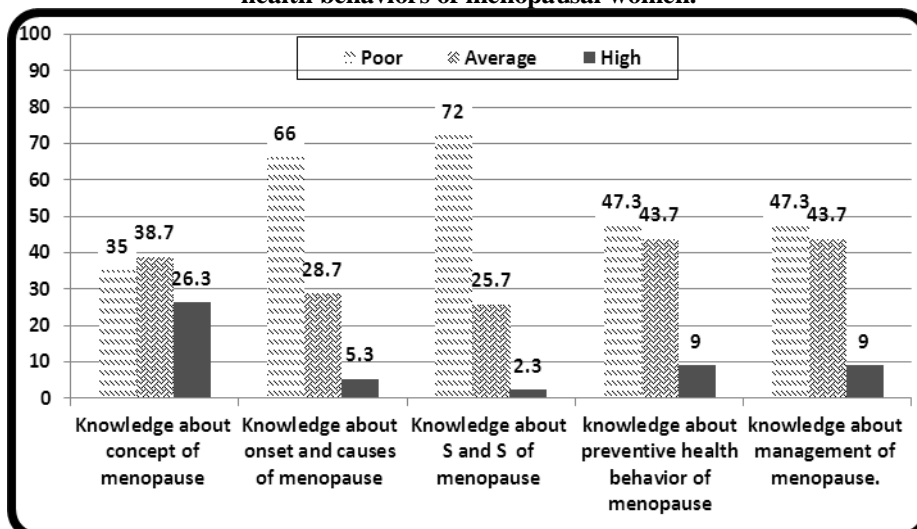


Table (1): Total level of Knowledge among studied women about health problems of menopausal women

Total level of knowledge (36)	Studied women (No=300)			
	No	%	t	P
Poor (1-12)	76	25.3	50.78	0.000*
Average(13-24)	169	56.3		
High(25-36)	55	18.3		

*Significant P<0.05

Table (2): Total level of Knowledge among studied women about preventive health behaviors of menopausal women

Total level of knowledge (29)	Studied women (No=300)			
	No	%	t	P
Poor (1-9)	133	44.3	38.29	0.000*
Average(10-19)	157	52.3		
High(20-29)	10	3.3		

*Significant P<0.05

Table (3): Correlation among socio-demographic characteristics and total level of knowledge about health problems of menopausal women among studied women.

Socio-demographic characteristics	Total level of knowledge about health problems of menopausal women (No=300)			F	P
	Poor (1-12)	Average (13-24)	High (25-36)		
Age					
15-20 years	5	3	2	2.533	0.08
21-30 years	50	96	33		
31-40 years	13	43	12		
40-49 years	8	27	8		
Level of education					
Illiterate	16	16	5	6.041	0.003*
Knows to read and write	29	53	11		
Secondary school	15	54	22		
University	16	46	17		
Occupation					
Working women	10	37	13	1.529	0.219
Housewife	66	132	42		

*Significant P<0.05

Table (4): Correlation among sociodemographic characteristics and total level of knowledge about preventive health behaviors of menopausal women among studied women.

Sociodemographic characteristics	Total level of knowledge about preventive health behaviors of menopausal women (No=300)			F	P
	Poor (1-9)	Average (10-19)	High (20-29)		
Age					
15-20 years	7	3	0	1.141	0.330
21-30 years	72	100	7		
31-40 years	30	35	3		
40-49 years	24	19	0		
Level of education					
Illiterate	29	8	0	7.252	0.000*
Knows to read and write	43	48	2		
Secondary school	36	55	0		
University	25	46	8		
Occupation					
Working women	16	37	7	8.010	0.000*
Housewife	117	120	3		

*Significant P<0.05

Table (5): Correlation among studied women knowledge about menopause and their total level of knowledge about health problems of menopausal women.

Do you have knowledge about menopause	Total level of knowledge about health problems of menopausal women (No=300)			F	P
	Poor (1-9)	Average (10-19)	High (20-29)		
Yes	49	126	48	4.437	0.013
No	27	43	7		

*Significant P<0.05

Table (6): Correlation among studied women knowledge about menopause and their total level of knowledge about preventive health behaviors of menopausal women.

Do you have knowledge about menopause	Total level of knowledge about preventive health behaviors of menopausal women (No=300)			F	P
	Poor (1-9)	Average (10-19)	High (20-29)		
Yes	91	124	8	5.012	0.002*
No	42	33	2		

*Significant P<0.05

Table (7): Correlation among Total level of knowledge studied women about preventive health behaviors of menopausal women and Total level of knowledge about health problems of menopausal women.

Total level of knowledge about preventive health behaviors of menopausal women	Total level of knowledge about health problems of menopausal women (No=300)			F	P
	Poor (1-12)	Average (13-24)	High (25-36)		
Poor (1-9)	44	70	19	6.012	0.003*
Average (10-19)	32	94	31		
High (20-29)	0	5	5		

III. Discussion

Menopause is an event in life, not a disease. It is a single event in a woman's life-her last menstrual period. Menarche heralds the onset of reproductive function, and menopause signals its end⁽²⁰⁾. With increase in life expectancy throughout the world most of the women will live through menopause. Therefore, they should have knowledge about the health effects of menopause and its prevention⁽²¹⁾. Therefore, the aim of the present study was to assess knowledge of women in reproductive age about menopausal problems and preventive health behaviors in Tanta city, Al -Gharbyia Governorate, Egypt.

In the present study it was found that most of the studied women were had knowledge about menopause. Although that it was found that more than one third, about two thirds, most of them and nearly half of them of the studied women had poor knowledge about concept of menopause, onset and causes of menopause, signs and symptoms and management respectively. This finding is in agreement with Malik (2008), who stated that the majority of women had heard about menopause, but few of them had knowledge about symptoms and long- term health risks⁽⁸⁾. Mustafa and Sabir (2012), reported that most of menopausal women heard about menopause and more than half of them had previous knowledge about symptoms⁽¹⁴⁾, this result is higher than the result of the study conducted in Hyderabad Pakistan by Nusrat et al., (2008), who found that the majority of women were aware about menopause but only few of them had knowledge about symptoms and health implication of menopause⁽²¹⁾. In contrast of this, one survey conducted at Mexico City by Velasco–Murrillo et al., (2000), reported that the majority of women have knowledge about climacteric symptoms⁽²²⁾. Regarding concept of menopause knowledge of the correct concept of the menopause has varied in different studies conducted in different countries. In Taiwan this percentage was more than half, in Ecuador it was about two thirds, in different regions of Pakistan it was about three quarters and in Turkey more than three quarters defined the menopause correctly^(23-26, 1). Another cross sectional descriptive study of 70 women conducted at MCH centre PIMS Islamabad Pakistan, reported similar results that (74.3%) respondents had heard and knew about menopause, (55.7%)were aware of symptomatology while only (10%) knew about sequel of menopause⁽²⁷⁾.

Menopausal symptoms are observed in all countries of the world but prevalence varies from society to society⁽⁸⁾. In the present study it was found that(70.7% , 67% , 65% and 58% respectively) of the studied women were reported that headache , feeling of warmth in the body, body pain, sleep disturbance, joint pain, and increase in the weight as physical health problems occur with menopause, (73%, 70.3%, 67.7%, 62.3% and 61.7% respectively) of them were reported that loosing of femininity, irritability, poor concentration, worry about body image and loosing control over emotion as psychological health problems occur with menopause and

(59.7%, 53.3%, 43.7 % and 40.7 % respectively) reported that cries easy, feels very lonely and separated, difficulty in sexual intercourse and feeling of losing loved one's as social health problems occur with menopause. Nusrat et al., (2008) were found that frequency of menopausal symptoms varied from 21.08% to 75.66% commonest symptom reported were backache, body ache and insomnia 653 (75.66%), 576 (66.74%) and 544 (63.4%) respectively and troubled sleep & short loss of memory was reported by 66.7% & 62.10% respectively. Vasomotor symptoms hot flushes and night sweats were reported by 59.4% and 45.19% of study subjects⁽²¹⁾. Similar symptoms were reported by Qazi (2006)⁽²⁸⁾. Whereas commonest symptom reported from Punjab were lethargy 65.4%, urinary symptom 56.2% and agitation 50.8%. Commonest symptom reported in a study from Karachi Sindh were body ache 86%, hot flushes 86% and irritability 65%^(29,30).

In Japanese population commonest symptoms were shoulder stiffness 50%, fatigue 2% headache 30% and Hot flushes 28%, while symptoms experienced by mid-aged Thai women were dizziness, tiredness, headache, joint aches/pain & backache. Middle aged women in Taiwan reported troubled sleep, backache & joint pain⁽³¹⁻³³⁾. Some studies shows the common symptoms of menopause are hot flushes and / or night sweats, trouble sleeping, vaginal dryness, mood swings, trouble focusing, impaired memory, nervousness, bone and joint complaints, experience an age-related decline of physical and mental capacity⁽³⁾. Anjum et al.,(2013) found that occurrence of menopausal complains varied from 17.39% (n=16) to 52.17% (n=48) and the most commonly reported were depression (n=48, 52.17%), body aches (n=43, 46.74%), uterovaginal prolapse (n=40, 43.48%), mood changes (n=39, 42.39%) and backaches (n=38, 41.30%)⁽³⁴⁾. Regarding psychological symptoms among the menopausal women Mustafa and Sabir (2012) reported that 58.6% with loss of short term memory which is inconsistent with the result of study done in Hyderabad Pakistan Nusrat et al, (2008) revealed 62.10% with loss of short term memory and 9.4% of menopausal women in this study had depressed mood which is lower than that reported from study in Egypt Loutfy et al., (2006) which revealed that 60.7% were complained from this symptoms^(14, 21, 35).

ElSabagh and AbdAllah (2012) found that the women in postmenopausal period suffered from severe different menopausal symptoms such as: musculoskeletal, hot flushes and sweating symptoms as well as sexual, bladder problem, dryness of vagina compared to premenopausal period. In the study conducted by Waidyasekera et al., (2009) among Sri Lankan women the joint and muscle discomfort, physical and mental exhaustion and hot flashes were the most prevalent menopausal symptoms. This similar with Gharaibeh et al., (2010) who found that vasomotor signs were reported to have the highest scores for severity as manifested by hot flushes and night sweating. Also Ashrafi et al., (2010) showed that night sweats, joint and muscle pain and hot flashes are the most common symptoms associated with menopause in Iranian women⁽³⁶⁻³⁹⁾. These differences in frequencies of symptoms may be associated to differences of race, life style, culture, genetics and diet. Also probably this wide variation related to methodological differences and under estimation of depression in our community due to stigma and shame from mental disorders.

In today's society, knowledge is power and women with accurate information and training about the menopause can be expected to have better quality of life⁽¹⁾. According to the results of the present study, the most commonly cited as sources of information about menopause were family members, followed by T.V and scientific magazines and books. Little information was obtained from medical sources (13.7%) and female magazine (5%) This may denote lack of communication between healthcare personnel and women regarding menopause. Physicians may not be likely to discuss about menopause with women who have not reached menopause or vice versa. This result was similar to those of studies conducted in countries like Pakistan (14%) and Egypt (17%), but less than Equator (65.9%) and Turkey (49%)^(26,24,40,41). Also this findings are in agreement with the results of Pan,etal.,(2002) who found that Taiwanese women reported family members specify women from their own generation (mother or sisters) as most frequently chosen source of menopause-related information⁽²³⁾. Nacaretal., (2008) reported that knowledge about the menopause has been received mainly from family members and friends and from media sources (books, newspapers, and television) and information obtained from medical personnel was low (16.6%)⁽¹⁾. While Al-Olayet et al., (2010) found that The three main sources of information regarding the menopause were: friends, television and physicians⁽⁴²⁾. The findings of the present study were disagreement with Wong and NurLiyana (2007) who reported that the most commonly cited as sources of information about menopause were reading materials (magazines, books) and families. Little information was obtained from medical sources⁽¹⁹⁾.

As regarding the preventive health behaviors of menopausal women, the current study referred that the studied women had poor level of knowledge about preventive health behavior and management of menopause which include hormone replacement therapy (HRT) and there was significant difference regarding the total level of knowledge of studied women regarding preventive health behaviors of menopause. In the study conducted by Loutfy et al., (2006) who found that the great majority (90.7%) had never heard about hormone replacement therapy (HRT). When asked about beneficial practices after menopause (60.7%) of the women mentioned taking vitamins and 55.3% reported exposure to sunlight. Regarding practices related to menopause, 88.9% had not consulted a physician⁽³⁵⁾.

Based on the collected data, there was positive correlation between total levels of knowledge of studied women about health problems of menopausal, total level of knowledge of studied women about preventive health behaviors of menopausal women and their level of education. This attributed to that educated women more likely better to deal with changes in menstrual period, consult doctors and receiving medications. This result 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), as 100% of women with college education had sufficient knowledge about applied methods for prevention of menopausal complications ($p = 0.01$, $p = 0.000$, $p = 0.000$ respectively)⁽⁴³⁾. The results also revealed that there was positive correlation between total level of knowledge of studied women about preventive health behaviors of menopausal women and their occupation; this may due to the women were more contact with menopausal women and shared the experiences with each other this is in agreement with the result of a study in Egypt (Loutfy et al, 2006)⁽³⁵⁾ and this attributed to that those who have skilled and professional occupation have better educational level and when they are complaining from any symptoms they consult a physician and getting more information.

The results showed that there was positive correlation among total level of knowledge studied women about preventive health behaviors and total level of knowledge about health problems of menopausal women, where forty four of studied women had poor score of knowledge about preventive health behaviors and health problems of menopausal women. Whereas ninety four of them had average score of knowledge and only five had high score of knowledge about preventive health behaviors and health problems of menopausal women. This was in the line with Bakouei et al. (2013), who stated that the majority of women with good awareness of symptoms and complications of menopause (46.5%) were those who have read or heard about menopause which was not assumed as a significant difference; while most of them with good awareness (49.7%) and adequate general information (52.9%) about the methods used for prevention of menopause effects were those who have read or heard some articles about it ($p = 0.000$, $p = 0.000$), which was assumed as a significant difference⁽⁴³⁾.

IV. Conclusion

Menopause is an important event in a woman's life. Women with accurate information about the menopause can be able to manage their problems better. In our study, nearly three quarters of studied women had the knowledge about menopause although forty four of studied women had poor score of knowledge about preventive health behaviors and health problems of menopausal women. Whereas ninety four of them had average score of knowledge and only five had high score of knowledge about preventive health behaviors and health problems of menopausal women. This study identifies the need for further research emphasized on the role of the nurses as health personnel who can assess knowledge and identify attitudes towards menopause and help them to select coping strategies to overcome the menopausal problems.

V. Recommendations

- It is important to encourage educational institutions, medical care providers and the health department to cooperate in educating women about menopause, its symptoms, long term consequences and treatment options. This combined effort by educational programs and health care providers will help in increasing public awareness.
- Health care professionals should understand women's attitudes regarding the menopause in order to give optimal information and help to create positive attitudes and healthy perceptions of the menopause.
- A study may be carried out on psychoeducational program for improving women attitude and coping with menopause symptoms.
- Counseling activities of premenopausal, menopausal and post menopausal women need to be popularized and facilities and decision aids made available to those who need them.
- Empowerment during the climacteric stage can contribute to improving the perception about this stage as well as the importance of self-care.

References

- [1]. Nacar M, Baykan Z and Cetinkaya F. Perceptions and attitudes toward the menopause: a study from Kayseri. Turkish Journal of Public Health, 2008;6(2):36-45.
- [2]. Metintas S, Arýkan I, Kalyoncu C and Ozalp S. Menopause Rating Scale as a screening tool in rural Turkey. The International Electronic Journal of Rural and Remote Health Research, Education, Practice and Policy.2010.
- [3]. Rahman S, Zainudin S, and Kar Mun V. Assessment of menopausal symptoms using modified Menopause Rating Scale (MRS) among middle age women in Kuching, Sarawak, Malaysia. Asia Pacific Family Medicine, 2010; 9:5.
- [4]. Ku S, Kang J, Kim H, Ku P, Lee H, Suh C Kim S, Choi Y, Kim J and Moon S. Regional differences in age at menopause between Korean-Korean and Korean-Chinese. Menopause, 2004; 11:569-574.
- [5]. Biri A, BakarC, Maral M., Karabacak O, and Bumin, M. Women with and without menopause over age of 40 in Turkey: Consequences and treatment options. Maturitas, 2005; 50:167-176.
- [6]. Syamala T and Sivakami M. Menopause: An emerging issue in India. Economic and Political Weekly, XL, 2005; 19-25.
- [7]. WHO. Research on menopause in the 1990s: report of a WHO scientific group. Geneva: WHO; (Technical Report Series). 1996:866.

- [8]. **Malik H.** Knowledge and attitude towards menopause and Hormone Replacement Therapy (HRT) among postmenopausal women. *J Pak Med Assoc*, 2008; 58(4):164-6.
- [9]. **Sallam H, Galal A, and Rashed A.** Menopause in Egypt: past and present perspectives, The Suzanne Mubarak Regional Center for Women's Health and Development, Egypt, 2006; 9 (6): 421-429.
- [10]. **Pal A, Hande D and Khatri S.** Assessment of menopausal symptoms in peri menopause and post menopause women above 40 years in rural area. *International J. of Healthcare & Biomedical Research*, 2013; 1(Issue3):166-74.
- [11]. **Anil Bindhu S.** Climacteric symptoms among women in a rural area in Kerala. *Journal of Evolution of Medical and Dental Sciences*, 2013; 2(Issue 19):3207-14.
- [12]. **Leon P, Chedraui P, Hidalgo L, and Ortiz F.** Perceptions and attitudes toward the menopause among middle aged women from Guayaquil, Ecuador. *Maturitas*, 2007; 57(3): 233-8.
- [13]. **Kowalcek I, Rotte D, Banz C, and Diedrich K.** Women's attitude and perceptions towards menopause in different cultures. Cross-cultural and intra-cultural comparison of pre-menopausal and post-menopausal women in Germany and in Papua New Guinea. *Maturitas*, 2005; 51(3): 227-35.
- [14]. **Mustafa G and Sabir J.** Perception and Experience Regarding Menopause among Menopausal Women Attending Teaching Hospitals in Erbil City. *Global Journal of Health Science*, 2012; 4(3):170-8.
- [15]. **Anitha K.** A 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. 2005.
- [16]. **Bernis C and Reher D.** Environmental aspects of menopause in Spain: Comparative results from recent research. *Menopause*, 2007; 14: 777-787.
- [17]. **Thomas S.** Menopause knowledge and attitudes of English-speaking Caribbean women: implications for health education. *Californian Journal of Health Promotion*, 2005; 3(2):167-76.
- [18]. **Sajatovic M, Friedman S, Schuermeyer I, et al.** Menopause knowledge and subjective experience among pre- and postmenopausal women with bipolar disorder, schizophrenia and major depression. *J Nerv Ment Dis.*, 2006; 194(3): 173-8.
- [19]. **Wong L and Nur Liyana A .** A Survey of Knowledge and perception of menopause among young to middle aged women in federal territory, Kuala Lumpur, Malaysia. *JUMMEC*, 2007; 10(2):22-30.
- [20]. **Pinto M .** A Study on Knowledge and Attitude Regarding Menopause among Rural and Urban Married Women in Mangalore. *South Asian Federation of Obstetrics and Gynecology*, 2010; 2(3):233-35.
- [21]. **Nusrat, N., Nishat, Z., Gulfaeen, H., Aftab, M., & Asia, N.** Knowledge, attitude and experience of menopause. *J Ayub Med Coll Abbottabad*, (2008); 20(1): 56-9.
- [22]. **Velasco M, Navarrete-H, Ojeda M.** Experience and knowledge about climacteric & menopause in women in Mexico City. *Ged Med Mex* (2000); 136(6):555- 64.
- [23]. **Pan H, Wu M, Hsu C, Yao Band Huang KE.** The perception of menopause among women in Taiwan. *Maturitas*, (2002); 41(4): 269-74.
- [24]. **Leon P, Chedraui P, Hidalgo L and Ortiz F.** Perceptions and attitudes toward the menopause among middle aged women from Guayaquil, Ecuador. *Maturitas*, 2007; 57(3): 233-8.
- [25]. **Mazhar S and Gul-e-Erum.** Knowledge and attitude of older women towards menopause. *J Coll Physicians Surg Pak*, (2003); 13(11):621-4.
- [26]. **Baig L and Karim S.** Age at menopause, and knowledge of and attitudes to menopause, of women in Karachi, Pakistan. *J Br Menopause Soc*, (2006); 12(2):71-4.
- [27]. **Chedraui P, Aguirre W, Hidalgo L, Fayad L.** Assessing menopausal symptoms among healthy middle aged women with the Menopause Rating Scale. *Maturitas*, (2007) ;57(3):271-8.
- [28]. **Qazi A.** Age, Pattern of menopause, climacteric symptoms and associated problem among urban population of Hyderabad Pakistan. *JCPSP*, (2006); 16(11):700-3.
- [29]. **Yahya S and Rehan N.** Age, pattern and symptoms of menopause among rural women of Lahore. *J Ayub Med Coll*, (2002); 14(3):9-12.
- [30]. **Jamelle R.** Awareness of Menopause and Pattern of menopausal symptoms in HRT clinic. *Pakistan J Obstet Gynaecology*, (1996); 9(2,3):16-8.
- [31]. **ASO T.** Demography of menopause and pattern of climacteric symptom in the East Asian region. First consensus meeting on menopause in East Asia region. [Online] 2003, [cited Oct 2004]. URL: <http://www.gfmeec.ch/books/booknp/24.htm>
- [32]. **Punyahotra S, Dennerstein L and Leheat P.** Menopausal experiences of Thai women. Part 1: Symptoms and their correlates. *Meturitas* 1997; 26:1-7
- [33]. **Wang S, Lue S, Juang K and Chiu L.** The Kinmen women-health investigation (kiwi): a menopausal study of & population aged 40-54 *maturitas*, (2001); 39(2):117-20.
- [34]. **Anjum F, Ghayas S, Jahan N and Yasin H.** Awareness and perception of menopause in Pakistani women. *World Journal of Pharmacy and Pharmaceutical Sciences*, (2013); 2(2):429-36.
- [35]. **Loutfy I, Abdel Aziz F, Dabbous N and Hassan M.** Women's perception and experience of menopause: a community-based study in Alexandria, Egypt. *East Mediterr Health J*, (2006); 12(2):93-106.
- [36]. **Elsabagh E and Abd Allah E.** Menopausal symptoms and the quality of life among pre/post menopausal women from rural area in Zagazig city. *Life Science Journal*, (2012); 9(2):283-91.
- [37]. **Waidyasekera H, Wijewardena K, Lindmark G, and Naessen T .** Menopausal symptoms and quality of life during the menopausal transition in Sri Lankan women. *Menopause*, (2009) ; 16: 164-70.
- [38]. **Gharaibeh M, Al-Obeisat S, and Hattab J** Severity of menopausal symptoms of Jordanian women. *Climacteric*, (2010); 13 (4): 385-94.
- [39]. **Ashrafi M, Ashtiani S, Malekzadeh F, Amirchaghmaghi E, Kashfi Fand Eshrati B .** Symptoms of natural menopause among Iranian women living in Tehran, Iran. *Int J of Reproductive Medicine*, (2010); 8 (1): 29-32.
- [40]. **Sallam H, Galal A and Rashed A.** Menopause in Egypt: past and present perspectives. *Climacteric*, (2006); 9(6):421-9.
- [41]. **Dişçigil G, Gemalmaz A, Tekin N, Söylemez A and Çetin G.** Perception of menopause in a group of women living in Aydin and Mugla, Turkey. *Türkiye Klinikleri J Med Sci*, 2008; 28: 494-9.
- [42]. **Al-Olayet A, Al-Qahtani I, Al-Essa D, AlSalek F, Al-Moutary R, Al-Mudimeg L ,Al-Marri S ,Al-Shemari S and Ajab nor M.** Severity of menopausal symptoms, and knowledge attitude and practices towards menopause among Saudi women , (2010); 5(24):4077-9.
- [43]. **Bakouei F, Basirat Z, Salmalian H, Omidvar S and Bakouei S.** Assessment of women's awareness level about symptoms and complications of menopause and methods to their prevention. *Journal of Local and Global Health Science*, 2013; 6. <http://dx.doi.org/10.5339/jlghs.2013.6/10.5339/jlghs.2013.6>