

Quality of Life Among of Menopausal Women

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Abstract

Background: The transition through menopause is a life event that can profoundly affect quality of life. More than 80% of women report physical and psychological symptoms that commonly accompany menopause, with varying degrees of severity and life disruption. Studies find that most women experience at least one or more of these symptoms as they transition through the postmenopausal stage of life. The **aim** of this study was to assess the menopause related symptoms and their impact on the women's quality of life. **Subjects and methods:** A descriptive design was carried out in Obstetrics and Gynecological department at maternity and children hospital in Makkah Al Mukkarrmah.. Convenient sample composed of 90 women at range of from 40-60years were recruited in the study. Interviewing sheet that was designed by the investigators and Menopause Specific Quality of Life Questionnaire (MENQOL) were used to collect the data. **Results:** The present study showed that the most severe symptoms in vasomotor, psychosocial, physical and sexual domains were, hot flushes (29%), experiencing poor memory (48.3%), being dissatisfied with their personal life (44.8%), Low backache (41.9%), and change in your sexual desire (36.8%). The overall scores of menopausal quality of life for each MENQOL domain are indicated that the highest mean score in sexual domain (3.19± 1.99), following by psychosocial (2.94± 1.45) then vasomotor (2.55± 1.53) and finally physical symptoms (2.28± .749). **Conclusion:** The present study concluded that most severe symptoms in vasomotor, psychosocial, physical and sexual domains were, hot flushes, experiencing poor memory, being dissatisfied with their personal life, low backache, and change in your sexual desire. The mean scores of physical and vasomotor domain were significantly more in postmenopausal (PM) group then menopausal transition MT group. While the mean scores of each domain suggest that menopausal symptoms were associated with decrease in women quality of life. **The current study recommended that:** Health care providers need to play a more visible and instrumental role in continuously assessing menopausal women's needs as well as implement appropriate health educational programs. Also further research addressing women's health needs is also essential for improving the quality of life of menopausal women in Saudi Arabia

Keywords: Menopause – Menopausal symptoms- Quality of life - MENQOL.

Introduction

Today, with increasing life expectancy and life span, women spend one-third of their lifetime after menopause^[1,2]. Menopause is an adaptation process during which women go through a new biological state. This process is accompanied by many biological and psychosocial changes^[3]. Menopause is a normal physiological process which is characterized by the permanent cessation of menses in women as a result of reduced ovarian hormone secretion usually between the ages of 45 and 55 years. During this period women can experience many symptoms including hot flashes, night sweats, sleep and mood disorders, impaired memory, lack of concentration, nervousness, depression, insomnia, bone and joint complaints, and reduction of muscle mass. The duration, severity, and impact of these symptoms vary extremely from person to person, and population to population. Some women have severe symptoms that greatly affect their personal and social functioning, and quality of life^[4]. Vasomotor symptoms, are common physical conditions experienced by midlife women in the transition through menopause and early post menopause^[5,6].

Psychological symptoms frequently associated with menopause include fatigue, irritability, and anxiety. Some symptoms associated with changing hormone levels are directly linked with estrogen depletion. Hot flashes, night sweats, and vaginal atrophy resulting in vaginal dryness are correlated with changing levels of sex hormones^[7]. Other symptoms, such as sleep disturbances, fatigue, anxiety, and weight gain, although common to the experience of menopause, are multi factorial in cause and occur in non-postmenopausal women as well^[8]. Studies find that most women experience at least one or more of these symptoms as they transition through the postmenopausal stage of life^[5].

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 'sociocultural 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].

Despite a majority of women experiencing multiple symptoms, the literature still presents a gap on whether clusters of symptoms consistently occur and what effect symptom clusters have on quality of life ^[5]. Study in Saudi Arabia showed those 'hot flashes' and 'sweeting' (68.5%), 'vaginal dryness' (37.3%) and 'sexual problems' (30.7%) were the most common symptoms in menopausal women. In addition, the most severe symptoms were hot flashes and excessive sweating ^[10]. The frequency of symptoms can vary based on epidemiological characteristics of the population and the assessment tools used ^[11]. The effect of menopausal transition on women's lives is complex and includes changes in physical health, psychosomatic domains, and personal life. Health-related quality of life may be severely compromised in women with vasomotor symptoms. Up to 40% of women in Sweden experience vasomotor symptoms until the age of 64 years ^[12].

Quality of life is a broad, multidimensional concept that lacks a precise definition in the medical literature. The World Health Organization has defined quality of life as individuals' perception of their position in life in the context of the culture and value systems in which they live and in relation to their goals, expectations, standards, and concerns ^[13]. Quality of life tends to decline in midlife women, and there is a need to determine what role, if any, symptoms commonly associated with the transition to menopause and early postmenopausal play in this phenomenon ^[14,15]. Quality of life is an important outcome measure of health care, and understanding the impact of menopause on quality of life is a critically important part of the care of symptomatic postmenopausal women ^[16]. The study of quality of life in the post-menopausal women has become an essential component in clinical practices. Most studies on quality of life of postmenopausal women were conducted in developed countries with different socio cultural realities, which may influence not only the perception of quality of life but also the experience of menopausal symptoms. Very little information exists about quality of life of postmenopausal women in developing countries ^[17].

Significance

The transition through menopause is a life event that can profoundly affect quality of life. More than 80% of women report physical and psychological symptoms that commonly accompany menopause, with varying degrees of severity and life disruption ^[1]. Few empirical studies, however, have examined the interrelated nature of symptoms associated with the menopausal transition and early postmenopausal and the effects of those symptom groups on quality of life ^[14]. Maintaining good physical functioning with age is a vital component of independence in later life ^[18,19,&20].

Identifying characteristics associated with poor physical functioning could contribute to prevention and management strategies that help older people to maintain their independence and also therefore their quality of life. Health-care providers play a more visible and instrumental role in continuously assessing menopausal women's needs as well as to implement appropriate health educational programs and to develop a new way to meet their demands ^[17].

Aim of Study

The aim of this study was to assess the menopausal related symptoms and their impact on the women's quality of life.

Research Questions

This study is directed to answer this question:

Are the menopausal symptoms impacts on the women's quality of life?

Subject and Methods

Research Design

Descriptive study design was used in this study

Setting

The study was conducted in Obstetrics and Gynecology department at maternity and children's hospital in Makkah Al Mukkaramah .

Subjects

A convenient sample of 90 women at menopausal stage was recruited in the study according to the following criteria:

- Mentally oriented.
- Women of age 40 - 60
- Don't uses hormonal replacement therapy

- Minimum read and write is accepted.
- Free from medical conditions like diabetes, hypertension, cardiac disease and thyroid disorder.

Tools:

Tools for data collection were consisting of:-

A - Interviewing sheet: was designed by the researchers and it includes data about women's socio demographic data: economic state, occupation & educational level, menstrual status etc...

B- Menopause specific quality of life questionnaire (MENQOL). It is a self-report measure assessing the presence and severity of menopause symptoms and the degree to which they adversely affect women's life designed by (Hilditch JR, Lewis J) ^[21]. It consists of 29 items divided into four domains: vasomotor (three items), psychosocial (seven items), and physical (16 items) and sexual (three items), the vasomotor domain assesses hot flushes, night sweats, and sweating. The psychosocial domain evaluates the psychological well-being of the individual by including items regarding anxiousness, memory, and feeling "blue". The physical domain assesses items such as flatulence, bloating, pain, tiredness, sleeping, energy and weight gain. The sexual domain inquires about changes in sexual desire, vaginal dryness, and intimacy.

The systematic scoring for each of the four MENQOL domains is identical. The seven-point Likert scale used during the administration of the MENQOL is converted for scoring and data analysis. For each of the 29 items, this seven-point Likert scale is converted to an eight point scale, ranging from 1 to 8. A "one" is equivalent to a woman responding "no", indicating she has not experienced this symptom in the past month. A "two" indicates that the woman experienced the symptom, but it was not at all bothersome. Scores "three" through "eight" indicate increasing levels of bother experienced from the symptom, and correspond to the "1" through "6". The score by domain is the mean of the converted item scores forming that domain and ranges from 1- 8. Severities of menopause symptoms scoring system as the following, Score range from 2-4 consider mild, score range from 5-6 moderate, and score range from 7-8 severe symptoms.

Validity and reliability

To measure content validity of the tools the researchers assure that items of an instrument adequately represent what are supposed to measure by presented it to 3 experts from obstetrics and Gynecology nursing) who conducted face and content validity of all item. All recommended modifications were performed. Also using *Menopause specific quality of life questionnaire (MENQOL)* is considering stander evidence support validity of the tools. The test-retest reliability for MENQOL questionnaires was good whether the interval between testing was one days. Domain internal consistency was calculated for each questionnaire using Cronbach's alpha and the degree of reliability alpha precision 88% of the study.

Administrative design

Needed permissions were obtained through appropriate channels. An official permission was obtained from the dean of the faculty of nursing at Umm Al-Qura University to the director of hospital requesting his approval for data collection.

Pilot Study

To assess the clarity, reliability and applicability of the study tools used in the study for data collection; a pilot study was conducted with a representative sample of ten women. The results of the pilot study helped in the necessary modifications of the tools in which omission of unneeded or repeated questions, adding missed questions was done. The women included in the pilot study were excluded from the study subjects.

Procedures

The researchers attended the gynecological ward of the studied setting two days per week, from 9.00 a.m. to 1.00 p.m. The study was conducted during the period October 2013 to December 2013. The researchers introduced themselves and briefly explained the purpose of the study to approached women who met the criteria for inclusion in the sample. All women were informed that participation is voluntary. Oral acceptance of women to participate in the study was obtained. Modifications of the tools were done accordingly. Data collection was carried out through interviewing with women; Time consumed for each interview ranges from 20 to 30 minutes with each woman using the previously mentioned tool. The researchers collect data related to socio demographic data, menstruation status, and menopausal symptoms.

Menopausal status was determined based on the reported length of time since last menstrual period. Women who reported still having normal menstrual cycles or with slight change in the length of cycle were classified as menopause transition (MT). While women whose last menstrual period occurred 12 months or more ago were categorized as post menopause (PM). The experience of symptoms, as tested in Menopause Specific Quality of Life (MENQOL) questionnaire. Menopause Specific Quality of Life (MENQOL) questionnaire consists of 29 items. All items followed the same format. Each woman was asked whether she experienced the symptoms in the previous six months, if answer was no she was asked next item and if answer was yes she was asked to indicate how bothered she had been by the symptoms on a 7 point scale ranging from 0=not at all bothered to 6 extremely bothered. For analysis score becomes 1 for "No", 2 for "Yes" through to 8 for "Yes (Extremely bothered)". Grading the severity of the symptoms as; mild, moderate or severe calculated as score

from 2-4 (mild), scores from 5-6 (moderate) and from 7-8 (severe). The tools of data collection were translated into Arabic by the researchers, tested and verified by bilingual persons.

Ethical consideration

After approval of the ethics committee, an official permission was obtained from the dean of the faculty of nursing to the director of hospital requesting his approval for data collection and informed consent was obtained from each participant. The significant and purpose of the study was explained to them, confidentiality of any obtained information was ensured to them.

Statistical Design

Data was collected, coded, tabulated and analyzed, using the SPSS computer application for statistical analysis. Descriptive statistics was used to calculate percentages, frequencies, Mean and standard deviations, Chi Square (X²), T. test are used to estimate the statistical significant differences. A significant P-value will be considered when P less than 0.05 and it will be considered highly significant when P- value less than or equal 0.01.

Results

The results of this study are presented under the following three heading demographic characteristics of the women, menopausal symptoms, and quality of life scores among menopausal women.

I. Demographic characteristics of the women

As regards to demographic characteristics of the sample, as shows in Figure (1) that about two third (62%) of the women's age ranged between 40->50 years. As shown in figure (2) illustrate that, the percentage of women who received formal university education was (53%), while (11%) of the women had intermediate education. In relation to occupation 51% of the women were housewives and 49% were working (figure 3).

As shown in Figure (4) illustrate menopausal stages of the women, it was found that 58% of the women at post-menopausal women. While 42% menopause transition.

II. Menopausal symptoms

Table (1) illustrated the severity of the menopausal symptoms among the studied subjects. It can be observed that, the most severe symptoms in vasomotor, psychosocial, physical and sexual domains were, hot flushes (29%), experiencing poor memory (48.3%), being dissatisfied with their personal life (44.8%), Low backache (41.9%), and change in their sexual desire (36.8%), while the mild symptoms in these domains were night sweats (54.2%), sweating (56.3%), feeling anxious or nervous (51.7%), Flatulence (wind) or gas pains (68.4%), difficulty sleeping (67.5%), Increased facial hair (67.7%), change in their sexual desire (60.5 %) & Avoiding intimacy (60.5 %).

In relation to the relationship between the severity of menopausal symptoms and menopausal stage, Table (2) showed that (29.16%) of postmenopausal women experienced severe symptoms as compared to only (8.33%) of women in transition menopausal. There was a statistically significant difference between the severity of menopausal symptoms and menopausal stage ($X=9.489$ at $P<0.009$).

As regard to the relationship between the severity of menopausal symptoms and demographic characteristics. Table (3) showed that there was a statistically significant difference between; the severity of menopausal symptoms and current age ($X=6.93$ at $P = 0.031$). However, there were no significant differences between; severity of menopausal symptoms and level of education and occupation.

III. Quality of life scores among menopausal women.

According to quality of life scores among menopausal women., Table (4) indicated that highest mean scores of symptoms in vasomotor, psychosocial, physical and sexual domains were, hot flush (3.27 ± 2.23), Feeling anxious or nervous (3.5 ± 2.25), experiencing poor memory (3.38 ± 2.10), aching in muscle & joint (4.88 ± 2.20), Feeling tired or worn out (4.62 ± 2.32), low backache (4.55 ± 2.25), Change in your sexual desire (36.1 ± 2.43) and Avoiding intimacy (3.20 ± 2.50) respectively.

As shown in table (5) the overall scores of menopausal quality of life for each MENQOL domain. It is showed that the highest mean score in sexual domain (3.19 ± 1.99), following by psychosocial (2.94 ± 1.45) then vasomotor (2.55 ± 1.53) and finally physical symptoms ($2.28 \pm .749$).

Table (6) represents the scores of four domains by menopausal status. The scores of physical domain were significantly more in postmenopausal (PM) group ($t=2.11$ at $P<0.03$) and the scores of vasomotor domain were high in post-menopausal (2.86 ± 1.56) as compared to (2.32 ± 1.48) in menopausal transition. There is no statistically significance difference as regarding to psychosocial and sexual domains.

Figure1: Distribution of the women by their age

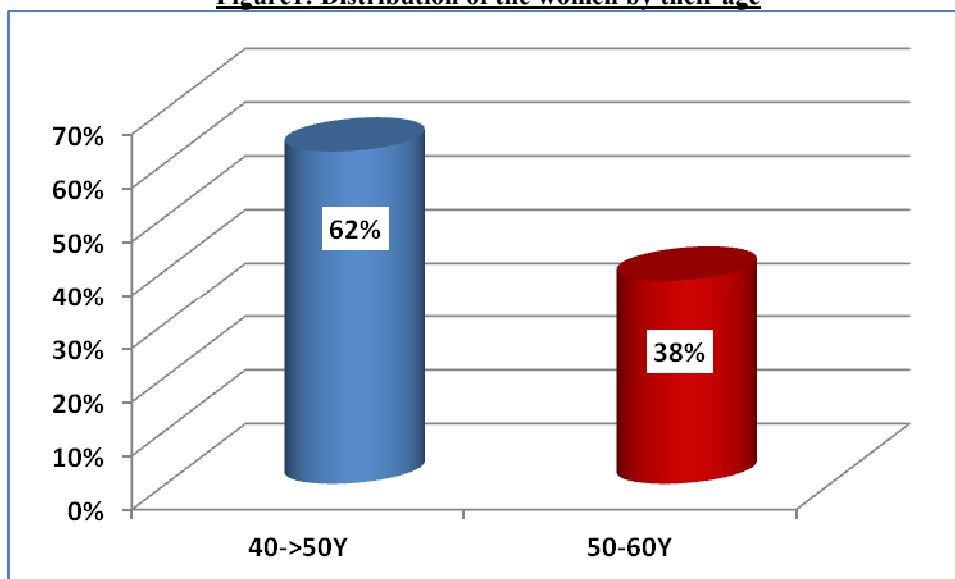


Figure 2: Distribution of the women by their educational level

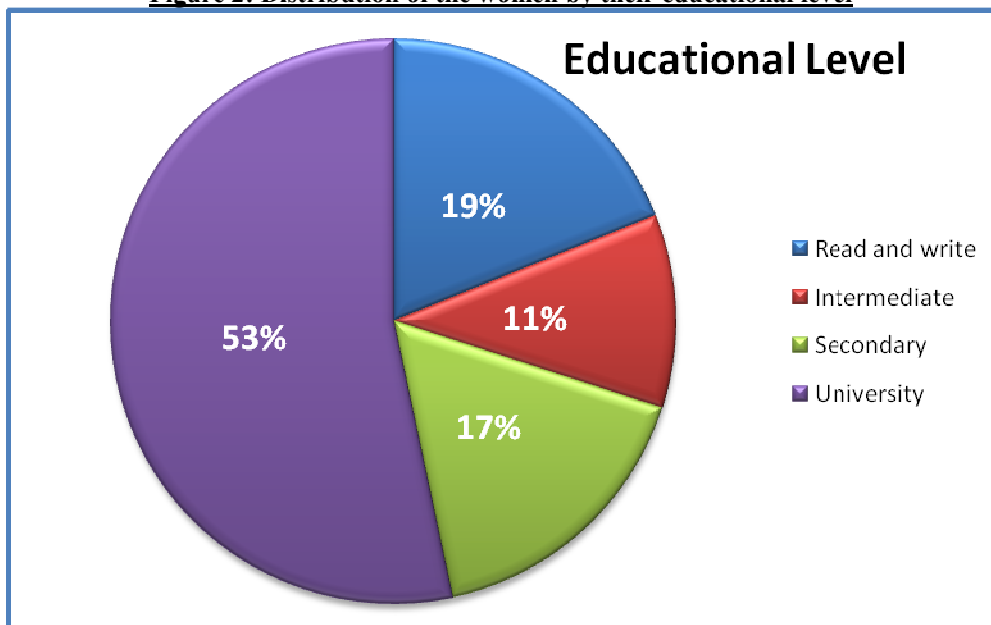


Figure 3: Distribution of the women by their occupation

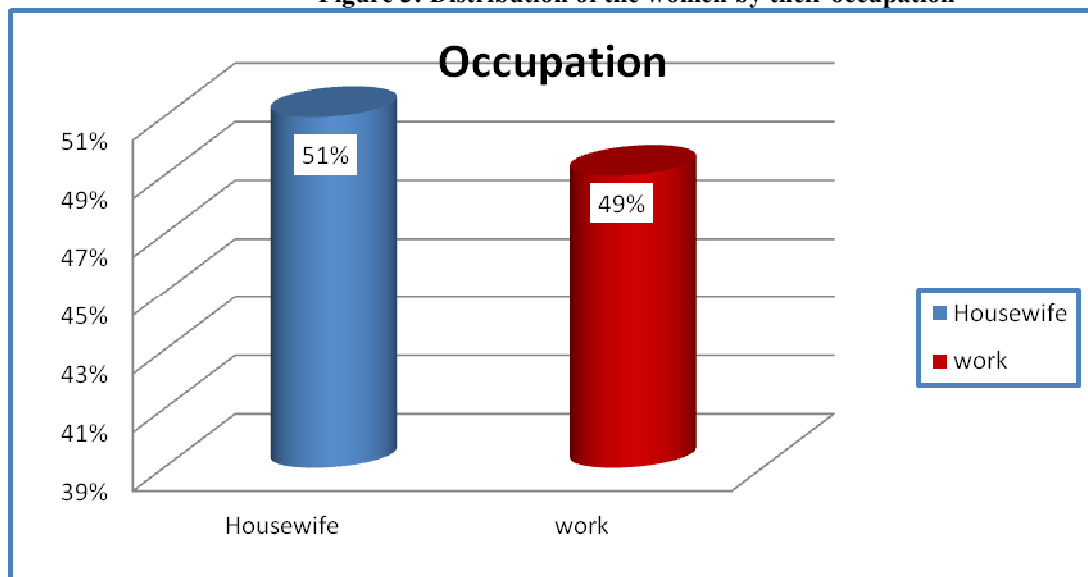


Figure 4: Distribution of the women by their menopausal stages

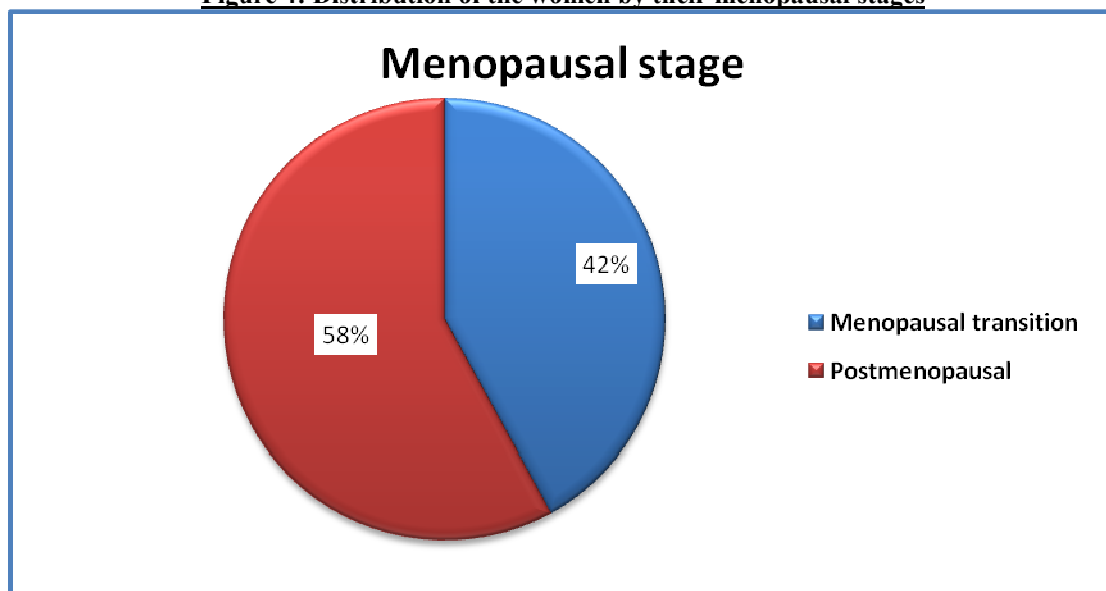


Table 1: Distribution of the women regarding to severity of menopausal symptoms

Symptoms*	Mild		Moderate		Severe	
	No	%	No	%	No	%
1.Vasomotor -	20	41.7	14	29.2	14	29.2
• Hot flushes	26	54.2	13	27.1	9	18.8
• Night sweats	27	56.3	14	29.2	7	14.6
• Sweating						
2.Psychosocial –	12	41.4	4	13.8	13	44.8
• Being dissatisfied with my personal life	15	51.7	3	10.3	11	37.9
• -Feeling anxious or nervous	12	41.4	3	10.3	14	48.3
• Experiencing poor memory	12	41.4	7	24.1	10	34.5
• Accomplishing less than I used to	12	41.4	6	20.7	11	37.9
• Feeling depressed, down or blue	13	44.8	4	13.8	12	41.4
• Being impatient with other people	13	41.4	4	13.8	12	41.4
• Feelings of wanting to be alone						
3.Physical -	39	68.4	3	6.3	15	26.3
• Flatulence (wind)or gas pains	44	59.5	7	9.6	23	31.1
• Aching in muscle & joints	40	55.6	9	12.5	23	31.9
• Feeling tired or worn out	35	67.5	4	7.7	13	25
• Difficulty sleeping	44	62.0	11	12.2	16	17.8
• Aches in back of neck or head	15	48.4	6	19.4	10	32.3
• Decrease in physical Strength	17	54.8	4	12.9	10	32.3
• Decrease in stamina	15	48.4	7	22.6	9	29
• Feeling a lack of energy	19	61.3	6	19.4	6	19.4
• Drying skin	13	41.9	7	22.6	11	35.5
• Weight gain	21	67.7	8	25.8	2	6.5
• Increased facial hair	16	51.6	10	32.3	5	16.1
• Changes in appearance, texture or tone of your skin	10	32.3	14	45.2	7	22.6
• Feeling bloated	12	38.7	6	19.4	13	41.9
• Low backache	11	35.5	12	38.7	8	25.8
• Frequent urination	12	38.7	11	35.5	8	25.8
• Involuntary urination when laughing or coughing						
4.Sexual	23	60.5	1	2.6	14	36.8
• Change in your sexual desire	21	55.3	10	26.3	7	18.4
• Vaginal dryness during Intercourse	23	60.5	5	13.2	10	26.3
• Avoiding intimacy						

*Multiple responses

Table 2: Relationship between the severity of menopausal symptoms and menopausal stage

Symptoms	Mild		Moderate		Severe		Total No (%)	X	p. value
	No	%	No	%	No	%			
*Menopausal stage									
• Menopausal transition.	12	25	7	14.5	4	8.33	23(47.9)	9.489	.009
• Post-menopausal	4	8.33	7	14.5	14	29.16	25(52.1)		

*Scores ranged from 2-8.

Table 3: Relationship between the severity of menopausal symptoms and demographic characteristics

Symptoms	Mild		Moderate		Severe		Total No (%)	X	p-value
	No	%	No	%	No	%			
Age-									
-40 ->50	10	20.83	11	22.91	6	12.5	27(56.3)	6.930	.031
-50- 65	6	12.5	3	6.25	12	2	21(43.7)		
Education-								8.107	N.S
• Read and write	3	6.25	1	2.08	2	4.16	6 (12.5)		
• Primary/Intermediate	2	4.16	2	4.16	3	6.25	7(14.5)		
• Secondary	6	12.5	2	4.16	1	2.08	9(18.8)		
• University	5	10.41	9	18.75	12	25	26(54.2)		
Occupation-								1.641	N.S
• Working	6	12.5	5	10.5	10	20.8	21(43.7)		
• House wife	10	20.8	9	18.8	8	16.66	27(56.3)		

Table (4): Score for each MENQOL domain

Domain	Total Scores *	
	Mean*	± SD
Vasomotor	2.55	1.53
Psychosocial	2.94	1.45
Physical	2.28	.749
Sexual	3.19	1.99

*MENQOL, menopause-specific quality of life questionnaire; Scores ranged from 1-8

Table (5): Mean distribution for each MENQOL domain scores by menopausal stage.

Domain	Menopausal transition. NO (52)		Post-menopausal NO (38)		t.	p. value
	Mean*	± SD	Mean*	± SD		
Vasomotor	2.32	1.48	2.86	1.56	1.66	.09
Psychosocial	2.77	1.50	3.17	1.36	1.30	NS
Physical	2.14	.72	2.48	.75	2.11	.03
Sexual	2.92	2.01	3.55	1.92	1.47	NS

*MENQOL, menopause-specific quality of life questionnaire; Scores ranged from 1-8

Discussion

Menopause has emerged as a prominent issue in the women's health. Aim of the present study was to assess the menopausal related symptoms and their impact on the women quality of life. Results of the current study answer the research questions that menopausal symptoms impacts on the quality of life of menopausal women.

As regards to the demographic characteristics of the study sample, it was found that more than half of the women's age ranged between 40-50 years. This result is similar with the results of the Study done by Al-Oleyat & noor (2010)^[10]. In this cross – sectional study a sample of 233 Saudi women from 45 to 55 years old. Also study done by Gehad and Galila (2010) the mean at menopause was 46.35 +_ 4.8 years in Egypt and mean age in Saudi Arabia was 49.9 + 2.23^[22]. In addition study done by Elsabagh and Abdullah (2012) indicated that women age ranged from 40-70^[23]. However, comparing our findings with previous researcher, ours still fall between the normal ranges of menopausal age.

As regards to the educational level, it was found that, more than half of the women had university education this is reflected upon women cooperation. In relation to occupation 51% of the women were housewives and 49% were working this result is supported by the results for the study carried out by Elsabagh E and Abd Allah ES.(2012) they indicated that less than two thirds (58.3%) of them were house wife and the rest of them were worker. As will as the same study revealed that 32.0% of women have primary or preparatory school while 25.1% among the studied sample were illiterate^[23].

As regards to the severity level of menopausal symptoms, the most severe symptoms in vasomotor, psychosocial, physical and sexual domains were, hot flushes, experiencing poor memory, being dissatisfied with their personal life, low backache, and change in their sexual desire, while the mild symptoms in these domains were night sweats, sweating, feeling anxious or nervous, flatulence or gas pains, aches in back of neck or head, increased facial hair and avoiding intimacy. This may correlates with fluctuating levels of estrogen in the blood from premenopausal to postmenopausal period. These results are accordance with the results of many studies reported that 'hot flashes' and

'sweating' were the most common and severe symptoms in menopausal women^[10, 24]. Chim, etal (2002)^[25] in a Singaporean are contradicted the results they indicated that the frequency of hot flashes and night sweats was 17.6% and 8.9%, respectively. In addition in United States,^[17] African-American women reported hot flushes most frequently (45.6%) followed by Hispanic (35.4%), Caucasians (31.2%), Chinese (20.5%) and Japanese (17.6%). Vasomotor symptoms are usually related to hormonal changes during menopause periods so this difference may have been due to genetic or socio-cultural diversity and also differences in diet, especially the consumption of phytoestrogen foods.

As well as In Malaysia, Jahanfar et al. (2006)^[26] who reported that the most common symptoms were found to be joint and muscle discomfort (84.3%), followed by anxiety (71.4%), physical and mental discomfort (67.2%), hot flashes and sweating (67.1%). These differences in frequencies of symptoms may be associated to differences of race, life style, culture, genetics and diet. In the study conducted by Waidyasekera et al. (2009)^[27] they reported that 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)^[28] they found that vasomotor symptoms were reported to have the highest scores as hot flashes and night sweating. In addition Ashrafi et al. (2010)^[29] showed that night sweats, joint and muscle pain and hot flashes are the most common symptoms associated with menopause in Iranian women. These findings were also noted by Rahman et al. (2010)^[30] emphasized that the frequency of sexual problems, bladder problems and vaginal dryness were experienced mainly by premenopausal and postmenopausal group of women and it was also significant statistically in comparison to other menopausal status.

The most prevalent psychosocial symptom in the present study was; poor memory that agrees with results of many studies, which indicated that the most common and severe symptom that was reported by women was poor memory^[25, 31, 32]. These contradict with the results of the study done by Kalahroudi MA etal. (2012)^[33] they revealed that the most prevalent psychosocial symptom was accomplishing less than I used to, but the most severe symptom was feeling anxious or nervous is contradicted with results of our study.

Regarding physical domain, our study showed that most of the women had a complaint of severe low backache while study done by Kalahroudi MA etal. (2012)^[33] report that feeling a lack of energy is the most complain and the most severe symptom was aching muscles or joints while somatic and psychological symptoms are not related to menopausal status because these symptoms are multi-factorial, rather than due to hormonal imbalance and middle-aged women usually experience these symptoms due to health problems related with aging. In addition Nisar N. and Ahmed S N., (2009):^[17] they stated that the frequency of physical and sexual symptoms was 99% and 66% respectively, similar findings were reported from China^[33].

Concerning sexual domains current study results showed that 60.5 % of women had a change in sexual desire, and avoiding intimacy', but a 'change in sexual desire' was more severe in 36.8 % of women than other sexual related symptoms. While in the study done by. Rostami A, etal (2004)^[35], they indicated that 92% of women reported avoiding intimacy. Also in Ecuadorian women this rate was 76.5%^[31], in Korean women the most common symptom was a change in sexual desire' that was severe in 27.1% of cases.^[36] In Singaporean women the most common and severe symptom was avoiding intimacy^[25]. Also, other investigators^[10, 37] stated that the prevalence of 'change in sexual desire' was approximately 30.7%. Also results of the study done by Greenblum CA. etal. (2012)^[8] indicated that the most commonly experienced symptom was hot flashes, with 73.2% of women currently experiencing that symptom^[8]. In decreasing order, the remaining frequencies were as follows: fatigue (58.0%), sleep disturbances (56.3%), anxiety (53.6%), irritability (51.8%), weight gain (51.8%), vaginal dryness (48.2%), and urinary incontinence (32.1%).

Results of the present study showed that the severity of menopausal symptoms had a highly significant association with; menopausal age ($X=6.93$ at $P = 0.031$), however, there were no significant differences between; severity of menopausal symptoms and level of education and occupation. This contradicted with the study done by Kalahroudi MA etal (2012)^[33] reported that menopausal symptoms had a significant association with working status, educational level, exercise activity, exercise frequency and duration of menopause. Several studies have shown that women who had longer education, reported milder menopausal symptoms^[39, 32]. But one study in Taiwan showed that educated women had more menopausal symptoms compared to less-educated women^[35].

Results of a study in Singapore also demonstrated that there was no association between level of education and menopausal symptoms^[25]. Several studies have also shown the impact of working status on the severity of menopausal symptoms^[25, 40, 2]. As regard to menopausal stages the current study showed that, less than one third of the postmenopausal women experienced severe symptoms because they had more time to adapt to the menopausal changes. This study finding is similar to studies by Lee et al.^[36, 38, 39],

According to quality of life scores among menopausal women, the current study revealed that the scores of physical domain were significantly more in postmenopausal (PM) group than menopausal transition MT group ($t=2.11$ at $P<0.03$) and the mean scores of vasomotor domain were high in post-menopausal (2.86 ± 1.56) as compared to (2.32 ± 1.48) in menopausal transition while there is no statistically significance difference as regarding to psychosocial and sexual domains. This results are accordance with Nisar N and Ahmed N (2009)^[17] they indicated that PM woman had significantly higher scores in physical domain then MT group $P<0.002$, while the scores of psychological

domain were significantly high in MT group then in PM ($p < 0.003$). A study from Thailand showed many symptoms to be significantly related to MT stage (such as hot flushes, upset stomach, insomnia, and urinary symptoms) only night sweats and joint aches and pains were significantly associated with PM stage [17]. Other studies reported that vasomotor complains were more prevalent in MT woman whereas psychological complains were more in PM women.

As regards to the overall scores of menopausal quality of life for each MENQOL domain, the results of current study showed that highest mean score in sexual domain, following by psychosocial then vasomotor and finally physical symptoms. Greenblum et al. (2012) [8] concluded that the symptoms found to most significantly affect quality of life were sleep disturbances, fatigue, and anxiety.

Conclusion

The current study concluded that the most severe symptoms in vasomotor, psychosocial, physical and sexual domains were, hot flushes, experiencing poor memory, being dissatisfied with their personal life, low backache, and change in their sexual desire. The mean scores of physical and vasomotor domain were significantly more in postmenopausal (PM) group then menopausal transition MT group. While the mean scores of each domain suggest that menopausal symptoms were associated with decrease in women quality of life.

Recommendation

The current study recommended that

1. Health care providers need to play a more visible and instrumental role in continuously assessing menopausal women's needs as well as implement appropriate health educational programs for women about the menopausal period and how to pass it safely.
2. Further research addressing women's health needs is also essential for improving the quality of life of menopausal women in Saudi Arabia.

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