

## Menopausal Symptoms and Quality of Life among Saudi Women in Riyadh and Taif

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**Abstract:** This work aimed to study the effect of menopause symptoms on Saudi women's quality of life. A descriptive study was carried out on a convenient sample of 120 women during their menopausal period who attended two gynaecologic clinics, in Riyadh, KSMC and Taif, KSA. The subjects were interviewed individually throughout a period of 10 months from February 2010 to November 2010. An interview questionnaire and Greene Climacteric Scale, and menopausal symptoms and the Manchester health questionnaire were used for data collection. The results showed 80% of none educated menopausal women had poor quality of life, 75% of the worker also, had poor quality of life and 63.7% of them who were multipara had poor quality of life. The Pearson correlation test proved a negative significant correlation between the total mean score of quality of life and total mean score of menopausal symptoms. The study concluded that Saudi menopausal women in the study subjects experience high prevalence of menopausal symptoms that adversely affected their quality of life. Women's general characteristics such as: educational level, cohabitation, family size and their gravidity were among factors contributed to their poor quality of life.

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### 1. Introduction:

The term "menopause" denotes the final cessation of menstruation, either as a normal part of aging or as the result of surgical removal of both ovaries. (Gharaibeh *et al.*, 2010). In a broader sense, the passing of time makes ovaries lose their ability to produce estrogen and progesterone, the hormones which regulate the menstrual cycle. In this stage, when menstruation ceases, there appear physical and psychical changes such as hot flushes, sweating, vaginal dryness, articulation and bone pain, headaches, insomnia, sadness, depression and loss of memory, known as climacteric symptoms (Zoleret *et al.*, 2005). Furthermore, the time of menopause often coincides with other major life changes, such as departure of children from the home, a midlife identity crisis, or divorce. These events, coupled with a sense of the loss of youth, may exacerbate the symptoms of menopause and cause psychologic distress. (Satohet *et al.*, 2005).

Midlife is the critical period of human life. In this period, women have the responsibility to take care of their grown up children, parents, and other family members (Chedraui *et al.*, 2009). This situation leads to women being identified as a sandwich generation (De Loach & Greer., 198, Alexander., 2001), they stated that physical disability occurring during middle-age presents problems that often differ from other developmental

periods. Thus, if middle age women have a disability, it may affect their quality of life.

Some peri-menopausal women, however, consider that these symptoms are natural and transient, and they often wait for the symptoms to pass. Therefore, community-dwelling, middle-aged, healthy women may possibly experience a decrease of QOL for 4–5 years around the menopause without any social help (Satohet *et al.*, 2005).

The WHO task Force on quality of Life (1993) defined it as an individual's perception of his/her position in life in the context of the culture and value systems in which the women lives, and in relation to her goals, expectations, standards and concerns. Also, the WHO identified four broad domains as being universally relevant for quality of life, namely physical health, psychological well-being, social relationships, and environment (Hendry ., 2004 and Pensri., 2007).

The menopause has been reported as one of the opportunities for women, to visit health-care services (Guthrie, 2003). Health-care providers need to 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. So, standardized measures are needed to assess changes of quality of life arising from menopause. (Krajewska ., 2007 and Gharaibeh

*al.*,2010). Thus the present study aimed to assess the effect of menopause symptoms on Saudi women's quality of life.

## 2. Subjects & Method:

### Research Settings:

This research was carried out in King Saud Medical Complex (KSMC), at the Gynaecological Clinic, and at King Abd El Aziz hospital in Taif.

### Subjects:

The sample consisted of 120 Saudi menopausal women, whom ages ranged between 45 and 55 years, who were seeking medical help. Women who are on HRT, or had an ovariectomy, hysterectomy or chronic disease were excluded from the study.

### Tool of Data Collection:

A structured questionnaire sheet was prepared by the researchers including 3 parts. First part , was developed by the researchers after exclusive review of literature , second and third part were modified from Greene Climacteric Scale (Greene .,1998), menopausal symptoms list by (Schneider and Behre., 2002 and Germainet *al.*,2001) and Manchester health questionnaire (Bugget *al.*, 2001) to collect the necessary data and cover the aim of the study as follow:

First part: used to collect the socio demographic data, including: age and level of education, occupation, gravidity, cohabitation and family size.

Second part: modified vision of Greene Climacteric Scale(Greene J.G.1998) and menopausal symptoms list (Germainet *al.*, 2001and Schneider and Behre., 2002)done by the researchers to assess the menopausal symptoms and severity. This part consisted of 62 items categorized under 10 main menopausal symptoms with different sub items .Each symptom severity scored from 0 (none) to 3 (severe). In order to facilitate analysis and interpretation of the result, total scores in each area were between zero and 100, those who obtained scores less than 25 were considered to have no symptoms, less than 50 was mild symptoms, less than 75 were moderate symptoms and more than 75 were considered to have severe symptoms.

Third part: The Manchester health questionnaire was developed by (Bugget *al.*, 2001) .The questionnaire is both a valid and reliable instrument for the assessment of health-related quality of life among women and it will be useful in many different clinical settings. So , it was modified by the researchers for the purpose of assessing the quality of life (QOL) for menopausal women, it

contained 15 items, categorized under 5 main areas with different relatedsub items.

A separate 5 point scale ranging from never (4) to always (0 point) was used for the measurement of each items. total score of each domain were ranged between zero and 100 ; the higher score indicating a good QOL, a lower score indicating a poor QOL and high effect of menopausal symptoms on quality of life. Those who obtained scores from 0 to 33.3 % were considered to have high effect of menopausal symptoms on QOL (poor QOL), more than 33.3 % to 66.7% were considered to have moderate effect of menopausal symptoms on quality of life ( average QOL) and more than 66.7% were considered to have mild effect of menopausal symptoms on quality of life ( good QOL)

### Methods:

Official permissions to conduct the study were obtained from the responsible authorities.

Informed consent to participate in the study was obtained from the subjects.

A pilot study was carried out after the development of the tool on 10 % of the sample of menopausal women who were taken from the previously mentioned setting.

Content validity of tools was determined through an extensive review of literature regarding menopausal symptoms and quality of life.

The structured questionnaire sheet was ascertained by jury who consisted of 5 experts with more than 10 years of experience in maternity and gynaecologic nursing, community health nursing and psychiatric health nursing. Modifications of the tools were done accordingly.

Each subject was individually interviewed using the previously mentioned tool. Time consumed for each interview ranges from 15 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.

### Statistical analysis:

The Data was collected and entered into the personal computer. Statistical analysis was done using Statistical Package for Social Sciences (SPSS/version 17) software. The statistical test used as follow:

Arithmetic mean, standard deviation, for categorized parameters Chai square test was used. While for twogroups t-test was used for parametric data, while for more than 2 groups ANOVA (F) test was used. Spearman correlation coefficient was used

to detect the correlation between different variables. The level of significant was 0.05.

### 3. Results

The general characteristics of the study subjects ( Table I ) showed that , slightly more than one half (54.17%, 50.83% respectively) of the study subjects were aged 50 to less than 55 years old and had primary or preparatory education respectively. The table (I) also presented that, half of them (50%) house wife, more than one third (34.17%) of the study subjects had more than nine children, most of them (94.17%) were multipara and less than two thirds (61.67%) live in extended family.

On assessing severity of the menopausal symptoms (Table II) it can be observed that, the highest mean scores of menopausal symptoms were in different domains urinary tract, muscles and skeletal ( 12.3±3.1, 10.4± 2.7, respectively) compared to respiratory and cardiovascular ( 2.0±0.9 and 3.4± 1.2, respectively) which are the lowest.

Concerning quality of life items (Table III), it can be observed that, mean scores of poor quality of life in different domains as physical limitation, role limitation, social limitation, and sleep and energy were averaged 6.98±4.98, 5.98±2.98, 6.98±4.98 and 5.65±2.98, respectively. This means that, the low score of quality life items (poor quality of life) high effect of postmenopausal symptoms on quality of life.

Regarding the relation between the general characteristics and quality of life (Table IV) , It was found that the majority (80%) none educated menopausal women had poor quality of life compared to educated women that had good quality

of life, there was a statistical significance differences between quality of life and education (P=0.04), As regards occupation ,three quarters (75%) of the worker also, had poor quality of life ,while more than one quarter were employed and had good quality of life, there was a statistical significance differences between quality of life and occupation (P=0.02). About two thirds 63.7% of menopausal women who were multipara had poor quality of life, there was a statistical significance differences between quality of life and gravidity (P= 0.01), It was observed that, the poor quality of life for the subjects who live alone and had no children (80% and 80% respectively, there was a statistical significance differences between quality of life and cohabitation (P= 0.01) and family size (P= 0.01) .

The Pearson correlation test proved a negative significant correlation between the total mean score of quality of life and total mean score of menopausal symptoms ( $r=-0.75$  and  $P=0.04$ ) as seen in Table V.

Regarding the correlation between total score of quality of life and menopausal symptoms, from this table it was found that there was a negative significant correlation between total score of quality of life and Gynaecological, Urinary tract, Integumentary, GIT, Muscle-skeletal, Vasomotor , Psychosocial and Sexual symptoms. i.e. the increasing in this symptoms cause significant decreasing in the total score of quality of life, while both CVS symptoms and respiratory symptoms had no significant correlation with total score of quality of life as showed in Table VI.

**Table I: Distribution of the study sample according to their general characteristics.**

General characteristics	No. (120)	%
<i>Age:</i>		
45	37	30.8
50-	65	54.2
55+	18	15.0
<i>Education:</i>		
Illiterate	10	8.3
Primary/Preparatory School	61	50.8
Secondary School	41	34.2
University	8	6.7
<i>Occupation:</i>		
Housewife	60	50.0
Worker	60	50.0
<i>Gravidity:</i>		
Null Para	7	5.8
Multi-Para	113	94.2
<i>Cohabitation:</i>		
Alone	15	12.5
Husband/Sibling	31	25.8
Relatives/Children	74	61.7
<i>Family Size:</i>		
Less than 3	21	17.5
3 to 5	22	18.3
6 to 8	21	17.5
9 and more	41	34.2

**Table II: Distribution of the sample according to the Severity of the menopausal Symptoms.**

Severity of menopausal symptoms	No	%	Mean +SD (range)
<b>Gynaecologic symptoms</b>			
None	6	5.0	7.4± 2.3 1-12
Mild	20	16.7	
Moderate	44	36.7	
Severe	50	50.0	
<b>Urinary tract symptoms</b>			
None	0	0.0	12.3±3.1 1- 15
Mild	5	4.2	
Moderate	38	31.7	
Severe	77	64.2	
<b>Integumentary symptoms</b>			
None	3	2.5	8.2± 2.5 1 – 15
Mild	5	4.2	
Moderate	44	36.7	
Severe	68	56.7	
<b>Gastrointestinal symptoms</b>			
None	0	0.0	8.1± 2.7 1-12
Mild	0	0.0	
Moderate	38	31.7	
Severe	82	68.3	
<b>Cardiovascular symptoms</b>			
None	13	10.8	3.4± 1.2 1-6
Mild	33	27.5	
Moderate	31	25.8	
Severe	43	35.8	
<b>Respiratory symptoms</b>			
None	33	27.5	2.0±0.9 1-3
Mild	32	26.7	
Moderate	55	45.8	
Severe	0	0.0	
<b>Muscles and skeletal symptoms</b>			
None	0	0.0	10.4± 2.7 1-18
Mild	6	5.0	
Moderate	65	54.2	
Severe	49	40.8	
<b>Vasomotor symptoms</b>			
None	2	1.7	6.1±2.2 1-9
Mild	0	0.0	
Moderate	16	13.3	
Severe	102	85.0	
<b>Psycho- social symptoms</b>			
None	0	0.0	7.1±2.6 1-12
Mild	10	8.3	
Moderate	40	33.3	
Severe	70	58.3	
<b>Sexual symptoms</b>			
None	0	0.0	6.5±2.8 1-9
Mild	5	4.2	
Moderate	40	33.3	
Severe	75	62.5	

**Table III: Distribution of the samples according to quality of life items**

Items	No	%	Mean +SD (range)
Physical limitation			6.98±4.98 0-12
Good	16	13.3	
Moderate	10	8.3	
Poor	94	78.3	
Role limitation			5.98±2.98 0-8
Good	7	5.8	
Moderate	10	8.3	
Poor	103	85.8	
Social limitation			6.98±3.98 0-12
Good	23	19.2	
Moderate	11	9.2	
Poor	86	71.7	
Psychological limitation			10.2±3.89 0-20
Good	8	6.7	
Moderate	10	8.3	
Poor	102	85.0	
Sleep & Energy			5.65±2.98 0-8
Good	0	0.0	
Moderate	4	3.3	
Poor	116	96.7	
Total quality of life score Mean± S.D. Range	45.9±4.2 0-60		

**Table V: Distribution of the sample according to their general characteristics and quality of life.**

General characteristics	Quality of life			Total N=120	P
	<i>Good</i> N=15	<i>Moderate</i> N=29	<i>Poor</i> N=76		
<b>Age (years)</b>					
40 -	5(13.5%)	12(32.4%)	20(54.1%)	37 (100%)	P=0.06 NS
50-	8(12.3%)	12(18.5%)	45(69.2%)	65 (100%)	
55+	2(11.1%)	4(22.2%)	12(66.7%)	18 (100%)	
Min -Max (age)	42 - 58	44 - 59	49-61	42 - 61	
Mean + _SD	51.8±11.9	52.7±13.2	55.4± 12.5	54.2 +- 11.7	
<b>Education</b>					
Illiterate	0	2(20%)	8(80%)	10(100%)	P= 0.04 Sig.
Primary\ preparatory school	4(6.6%)	15(24.6%)	42(68.8%)	61(100%)	
Secondary school	8(19.5%)	11 (26.8%)	22(53.7%)	41(100%)	
University	3(37.5%)	1(12.5%)	4(50%)	8(100%)	
<b>Occupation</b>					
House wife	1(1.7%)	17(28.3%)	42(70%)	60(100%)	P=0.02 Sig.
Worker	0	2(25%)	6(75%)	8(100%)	
Employ	14(26.9%)	10(19.2%)	28(53.9%)	52(100%)	
<b>Gravidity</b>					
Null Para	0	3 (42.9%)	4(57.1%)	7(100%)	P= 0.01 Sig.
Multi-Para	15(13.3%)	26(23%)	72(63.7%)	113(100%)	
<b>Cohabitation</b>					
alone	0	3(20%)	12(80%)	15(100%)	P=0.001 Sig.
Husband\ sibling	2(6.5%)	4(13%)	25(80.5%)	31(100%)	
Relatives\ children	13(17.6%)	22(29.7%)	39(52.7%)	74(100%)	
<b>Family size:</b>					
Less than 3	1 (4.7%)	6 (28.6%)	14 (66.7%)	21 (100%)	P=0.01 Sig.
3 - 5	5 (22.7%)	4 (18.2%)	13 (59.1%)	22 (100%)	
6 - 8	0	4 (19%)	17 (81%)	21 (100%)	
9 & More	9 (22%)	12 (29.3%)	20 (48.7%)	41 (100%)	

**Table V: The total means score and relation between severity of menopausal symptoms and quality of life among menopausal women**

Total N= 120	Total mean score of menopausal symptoms	Total mean score of quality of life
<i>Min- Max</i>	0- 84	0-60
<i>Mean + SD</i>	51.6±8.2	45.9±4.2
<i>Pearson correlation ( r )</i>	- 0.75	
<i>Significance (2 tail)</i>	0.04 sig.	

**Table VI: Correlations between total score of quality of life and total score of menopausal symptoms as well as symptom's sub domains**

Total score of Menopausal symptoms	Pearson correlation (r)	Significance
Gynaecological symptoms	- 0. 62	0.05*.
Urinary tract symptoms	- 0.75	0.03*
Integumentary symptoms	- 0.68	0.04*
GIT symptoms.	-0.80	0.01*
CVS symptoms.	- 0.58	0.07 NS
Respiratory .symptoms.	- 0.51	0.06 NS
Muscle-skeletal symptoms	- 0.85	0.001**
Vasomotor symptoms.	-0.70	0.04*
Psychosocial symptoms	- 0.72	0.03*
Sexual symptoms.	-0. 81	0.01*

#### 4. Discussion:

Menopause is a transitional period that every woman goes through if she lives beyond the age of 52 years (Gharaibehet *et al.*, 2010). The individual response to menopause and estrogen deficiency varies considerably due to genetic, cultural, lifestyle, socioeconomic, education, and dietary factors (Sturdee.,2008).

Unfortunately, the incidence of menopausal symptoms may be increasing due to modern life styles which tend to emphasize ease rather than physical activity (Leplegeand Lorraine., 2000). The results of the present study revealed that, almost all of the Saudi women in the study subjects suffered from different menopausal symptoms such as: musculoskeletal, sexual, vasomotor, psychological as well as cardiovascular symptoms. These results are congruent with Gharaibehet *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. The prevalence of cardiovascular diseases increases more dramatically in older post-menopausal women, potentially attributable to the decline in sex steroids (Leplegeand Lorraine, 2000).

Poor scores for different items of quality of life were observed among the study subjects including physical, role, social and psychological limitation as well as sleep and energy. These results were supported by Sturdee(2008) who denoted that, hot flush is the characteristic and most common menopausal symptoms and together with night sweats and disturbed sleep can have a major impact on quality of life.

A negative significant relation was demonstrated between quality of life and post-menopausal symptoms, where quality of life adversely affected by postmenopausal symptoms among the postmenopausal Saudi women in the study subjects. This in agree with the results of Karaçamand eker(2007)who found a significant and moderately negative relation between total menopausal symptom scores and quality of life scores. Also, Daly *et al.*, (1993) concluded that quality of life is severely compromised by the presence of menopausal symptoms, indicating that the effects of these symptoms may have been underestimated. Wafaa .,(2007)explained these results by the fact that wellbeing in general is related to self-rated health status, symptoms, stress, vasomotor symptoms and attitude toward aging and menopause.

Regarding factors associated with post-menopausal symptoms and their relationship with the quality of life among the post-menopausal Saudi women in the study subjects, a significant relation

was observed between quality of life and their general characteristics including: education, occupation, cohabitation, family size as well as their gravidity. Similar results were reported by Gharaibehet *et al.*(2010)who found a significant relationship between the severity and occurrence of menopausal symptoms and age, family income, level of education, number of children, perceived health status and menopausal status.Krajewskaet *al.* (2007) added that age, level of education and working/non-working status may contribute to significant variations in menopausal symptoms. This may be related to the fact that menopausal symptoms are influenced by socio- demographic/ socio-cultural factors, economical stresses, general health status, individual perception of menopause, genetic and racial differences and reproductive parameters like parity (Nisar andSohoo2010).

#### Conclusion:

It can be concluded that post-menopausal Saudi women in the study subjects experience high prevalence of menopausal symptoms that adversely affected their quality of life. Women's general characteristics such as: educational level, cohabitation, family size and their gravidity were among factors contributed to their poor quality of life.

#### Recommendation:

This study has implications for research, practice and education where, Health-care providers need to play a more visible and instrumental role in continuously assessing menopausal women's needs as well as to implement appropriate health educational programs. 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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