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Menopausal Symptoms and Quality of Life

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Abstract: The aim of this study was to assess the association between menopausal symptoms and the women's quality of life (QOL). An exploratory descriptive study was conducted at Faculty of Nursing, university of Alexandria. Subjects of the study included all employees of the previously mentioned setting aged between 40 to 55 years old. Assessment sheet, Menopause Rating Scale and Quality of Life scale are the tools for data collection. Findings revealed that those who had no psychological symptoms reported better quality of life (X=94.50±11.475) than those who had severe psychological symptoms (X=62.64±12.549). The same results were observed with the somatic symptoms and urogenital symptoms, as the mean score of quality of life of those who had no somatic (X=88.00±11.314) or urogenital symptoms (X=83.14±12.104) was higher than who had severe somatic (X=75.31±11.026) or sever urogenital symptoms (X=68.50±12.021). In relation to the total score of menopause rating scale and the total score of quality of life, it was found that better quality of life was reported among those who had no symptoms (X=88.00±11.314) or mild symptoms (X=88.04±11.314). The results also revealed that there were statistically significant differences between the total score of quality of life and the number of living children (p<0.028), medical history of the woman (p<0.041), housing condition (p<0.001), and income (p<0.001). It can be concluded that severity of menopausal symptoms has a negative association with overall quality of life. Increased number of children, presence of health problems, not suitable housing condition, and not enough income were negatively associated with QOL. Most of the quality of life domains are adversely affected by the presence of menopausal changes. Further researches are required to assess the intervention for peri-and post-menopausal women in context of their needs and expectation.

Key words: Menopause; Quality of Life; Menopausal Symptoms

TNTRODUCTION

Approximately 90% of women have regular menstrual cycles until they are 40 years old, while only 10% have regular cycles up to 50 years. Menopause, the age of the last menstrual period, is one of the problems of advancing age It occurs at average age of 50 years, with range usually 48 and 52. This age is characterized by decline in functions of the hypothalamic-pituitary-ovarian

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systems occurring approximately for 10 years but most marked during the one to two years before cessation of menstruation.[1-3]

The physiologic impact of perimenopause may cause a woman to experience a variety of symptoms. Psychological symptoms such as: depressive mood (feeling down, sad, on the verge of tear, lack of drive, and mood swings); irritability (feeling nervous, inner tension, feeling aggressive); anxiety (inner restlessness, and feeling panickly); and physical and mental exhaustion (general decrease in performance, impaired memory, decrease in concentration, and forgetfulness). Somatic symptoms include: hot flashes; episodes of sweating; heart discomfort (unusual awareness of heart beat, heart skipping, heart racing, and tightness); sleep problems (difficulty in falling asleep, difficulty in sleeping through, and walking up early); and joint and muscular discomfort (pain in the joints and rheumatoid complains). Urogenital symptoms such as: sexual problems (change in sexual desire, in sexual activity, and satisfaction); bladder problems (difficulty in urinating, increased need to urinate, and bladder incontinence); and dryness of vagina (sensation of dryness or burning sensation, and difficulty in sexual intercourse). Approximately 30% up to 40% of women find their lives significantly disrupted by these symptoms.[4-6]

Menopause is gaining an increasing attention because of the growing emphasis on women rights as well as the increase in the life expectancy of women resulting in an increased the number of women attaining the age of menopause. In developing countries, postmenopausal women constitute 5% to 8% of population, while in Egypt, the density of older females, 50 years or more, is 11.6%.[2]

Each woman reacts somewhat differently to the changes in menopausal endocrine function. These reactions are unpredictable and depend - to some extent - on a woman's emotional history, support system within the family, and the fact that the menopausal reproductive-

endocrine system may be quite labile during this interval, which may last as long as 10 years.[7,8]

Culture perspectives also influence women's responses to menopause as the childbearing years and women face developmental transition and enter a new phase of life. In cultures that value youth and reproductive capacity, menopause signifies loss of socially valued status, which may contribute to depressive symptoms. In culture where older women have heightened social status, as among Native Americans, menopause is not associated with negative reactions. On the other hand, some women view the menopause as a medical problems requiring medical treatment, others, see it as a natural transition to be managed by natural means.[1,2]

The menopause period may have a negative impact on the quality of life of woman. The concept of the quality of life (QOL) has evolved considerably over the last decades yet there is no single, universally accepted definition of quality of life.[9] Tertar(10) *et al.,* conceptualize it as a multifaceted construct that encompasses the individual behavioral and cognitive capabilities, emotional well-being and abilities requiring the performance of domestic, vocational and social role. Avis[7] et al., and Revicki *et al.,* [11] refer to the quality of life as a broad range of human experiences related to one's overall well-being.

The maternity nurse has an important role in helping women to cope with the symptoms of menopause. Teaching and counseling about menopause, its symptoms, and medical and alternative therapies are foremost in the arsenal of intervention available to nurses in this area. Moreover, the maternity nurse plays an important role in promoting positive practices and behaviors related to the reproductive health for each woman, encourage women to determine their health goals and behaviors, teach about health and illness, offer interventional strategies, and provide support and ongoing monitoring.[1,3,5]

The aim of this study is to assess the association between menopausal symptoms and the women's quality of life.

MATERIAL and METHOD

I. Material

Study Setting

An exploratory descriptive study conducted at Faculty of Nursing, University of Alexandria.

Subjects

All employees of the previously mentioned setting aged between 40 to 55 years old.

Tools for data collections

1. Menopause Rating Scale validated by Heinemann *et al*.[4] This scale was developed to study severity of symptoms of menopause. It consists of 11 short statements with 5 points scale, severity 0 [none], 5 [very severe]. Each subject was instructed to choose one of the five possible responses that is closest to the degree of the symptom she feels.

   The scale included 3 dimensions or subscale namely, psychological, somatic, and urogenital subscales. The composite score for each of the three dimensions (subscales) is based on adding up the scores of the items of the respective dimensions. The composite score (total score) is the sum of scores of the three dimensions. High score indicated more severe symptoms.

2. The Quality of Life scale developed by Flanagan.[12,13] This scale has been found to have a good reliability and validity.[14,15] The scale is composed of 16 items designed to measure six domains: (a) Physical and material well-being, (b) relations with others, (c) social, community, and civic activities, (d) personal development and fulfillment, (e) recreation, and (F) independence. The score ranged from 16 to 112, a total score was computed by summing the responses of each item. High score indicated better Quality of Life.

   Each subject was instructed to choose one of the seven possible responses that are closest to how she felt with the statement. The responses

categories scored 1, 2, 3, 4, 5, 6, and 7 according to the satisfaction. The total score was calculated by adding together the score of each item.

Both scales were translated into Arabic by the researcher, tested and verified by bilingual persons.

In addition, the subjects were instructed to complete a developed assessment sheet that covers the following areas: personal and demographic characteristics as age, menstruation, level of education, occupation, health history of the subjects, health history of the children, and health history of the husband.

II. Methods

Official permission to conduct the study was obtained from the responsible authorities. Informed consent to participate in the study was obtained from the subjects. A pilot study was carried out on a sample of 10 subjects who were selected randomly from the previously mentioned setting.

Each subject enrolled at the previous setting was individually interviewed using the previously mentioned tools. Time consumed for each interview ranged from 30 to 45 minutes. The collected data were categorized, tabulated, and made ready for analysis.

Statistical analysis

Statistical analysis was performed using SPSS versaion 11.5 for Windows. Pearson product moment correlation, analysis of variances with Scheffe method, and t-test to compare between scores of each clinical characteristics were used with 0.05 level of significance.

RESULTS

Table 1 presented that slightly more than one-quarter (25.9%) of the study subjects were aged 45 to less than 50 years old, less than one half (44.8%) aged 55 years old or more, more than two thirds (70.7%) were married, 10.3% were divorced, and 19.0% were widowed. The table also presented that less than one-quarter (20.7%) of the study subjects had four or more children, slightly more than two-thirds (67.2%) had chronic diseases such as hypertension or diabetes, depression, handicapped, or asthma,

more than one half (56.9%) their husband had a chronic disease, e.g., diabetes hypertension, depression, or asthma, and 13.8% of the study subjects had their children complained of chronic diseases such as diabetes or asthma. Regarding housing condition, it was observed that the majority of the study subjects (82.8%) found their house suitable, more than one-third (39.7%) had not enough income, 5.2% had either their mother or their mother in low living with them at the same house and more than one half (55.2%) originated from rural areas. As regards cessation of menstruation, it was found that slightly more than tow-thirds (67.2%) of the study subjects had complete cessation of menstruation.

Table 2 presented the relation between the severity of menopausal symptoms and quality of life. It was observed that those who had no psychological symptoms reported better quality of life (X=94.50±11.475), than those who had severe psychological symptoms (X=62.64±12.549), the same results were observed with the somatic symptoms and urogenital symptoms, as the mean score of quality of life of those who had no somatic (X=88.00±11.314) or urogenital symptoms (X=83.14±12.104) were higher than those who had severe somatic (X=75.31±11.026) or sever urogenital symptoms (X=68.50±12.021)

In relation to the total score of menopause rating scale and the total score of quality of life, it was found that better quality of life was reported among those who had no symptoms (X=88.00±11.314) or mild symptoms (X=88.04±10.875).

Figure 1 presented the severity of menopausal symptoms. It was observed that 48.2% and 41.4% of the study subjects scored their symptoms as mild and moderate, respectively, only 3.5% reported no symptoms and 6.9% had severe symptoms.

Table 3 illustrated the distribution of the study subjects according to their demographic characteristics and total score of quality of life. It was found that there were statistically significant differences between the total score of

quality of life and the number of living children (P<0.028), medical history of the woman (P<0.041), housing condition (P<0.001), and income (P<0.001)

Table 4 summarized the correlation between the quality of life domains and the severity of menopausal symptoms. It was found that statistically significant differences were observed between physical and marital well being domain and the severity of psychological and urogenital symptoms as r=-0.456 (P<0.001) and-0.347 (P<0.008), respectively, while no statistical difference was found between the same domain and the somatic symptoms as r=-0.242 (P<0.067). Regarding social, community, and civic activity domain, statistically significant differences were found between this domain and all menopausal symptoms as r=-0.365 (P<0.005), r=-0.4 (P<0.002), and r=-0.219 (P<0.099). Also, personal and development domain adversely affected by menopausal symptoms (r=-0.457 (P<0.001), r=-0.417 (P<0.001), and r=-0.431 (P<0.001). In relation to the recreation domain, it was observed that statistically significant differences were found between this domain and psychological symptoms (r=-0.424 (P<0.001) and somatic symptoms, r=-0.336 (P<0.01).

DISCUSSION

Quality of life (QOL) is a multidimensional health concept, which represents mainly subjective symptoms that may influence the sense of well being and day-to-day function. It includes several important domains, such as perceived well being, role disability, and physical; psychological; and social function. Women may experience significant QOL changes during menopause, and only few researchers have quantified these changes.[16] The aim of the present study was to assess the association of menopausal symptoms and the women's quality of life.

The results of the present study suggested that the presence of menopausal symptoms and its degree of severity may have affected adversely the study subjects quality of life (Table 2). This agrees with Daly *et al*.,[16] who

concluded that QOL was severely compromised by the presence of menopausal symptoms, indicating that the effects of these symptoms might have been underestimated. This may be explained by the fact that well being in general is related to self rated health status, symptoms, stress, vasomotor symptoms, and attitude toward aging and menopause.[16] However, these findings do not agree with O'Dea *et al*.,[18] and Ledesert *et al*.,[19] who did not find that menopause status was related to the overall well-being.

The findings of the current study summarized that increased number of children, presence of health problems, not suitable housing condition, and not enough income were negatively associated with QOL, (Table 3). These results are in line with Avis *et al*.,[7] who concluded that some of the factors associated with subjective well being or QOL in general population included state of health and stress, while other researches has shown that income and health status are not related to QOL.

Menopausal transition was associated with several physical and psychological changes that may impact women's health outcomes. Several researches have suggested that menopausal transition leads to significant decreases in physical activity, energy expenditure, resting metabolic rate, and fat free mass. Marital status was also reported to be significantly associated with better QOL.[20] This is remarkably consistent with the results of the present study as statistically significant differences were found between physical and marital well being domain and the severity of psychological and urogenital symptoms of menopause. This may be explained by the fact that the poorer physical role function may be associated with estrogen deficiency.

Regarding the different quality of life domains, the results of the present study revealed that statistically significant differences were found between social, community and civic activity domain, personal and development domain and all menopausal symptoms, while statistically

significant differences were observed between the recreation domain, psychological and somatic symptoms of menopause. This agreed with Futh *et al*.,[20] who found a marked impairment in QOL domain surveyed in their study. This could be explained by the fact that most of women view menopause as a medical condition requiring medical treatment which adversely affect these domains. Furthermore, lack of knowledge about menopause which may reflect a negative attitude toward menopause which in-turn adversely affects the quality of live.

CONCLUSION

Based on the findings of the present study, it can be concluded that severity of menopausal symptoms has a negative impact on overall quality of life. Increased number of children, presence of health problems, not suitable housing condition, and not enough income were negatively associated with QOL. Most of the quality of life domains are adversely affected by the presence of menopausal changes.

REOCMMENDATIONS

1. Further researches are required to assess interventions for peri- and post-menopausal women in the context of their needs and expectation.
2. Maternity nursing curricula must entail the concept of quality of life.
3. Increase the awareness of pre-menopausal women about menopausal changes should be promoted.
4. Mass media reinforces messages given by health personnel to women around menopause.
5. Misconceptions about the changes associated with menopause need to be addressed and corrected.
6. Development of support groups through none governmental organizations could help women to overcome problems that may be encountered during the menopausal period and affect the quality of life.
7. Develop a simple booklet about the menopausal changes to be distributed to women during menopausal age containing the

needed information about the available services and facilities as well as some treatment modalities and the way to deal with the symptoms.

8. Health professionals as a group need to be aware of the possible negative impact of the menopausal symptoms on the women's quality of life

Table 1: Distribution of the study subjects according to their demographic characteristics.

Demographic characteristics	N= 58	
	No.	%
Age		
45-	15	25.9
50-	17	29.3
55	26	44.8
Marital status		
Married	41	70.7
Divorced	6	10.3
Widowed	11	19.0
Cessation of menstruation		
Yes	39	67.2
No : Regular	8	13.8
Irregular	11	19.0
No. of living children		
None	5	8.6
1-	3	5.2
2-	21	36.2
3-	17	29.3
4+	12	20.7
Medical History : presence of any chronic disease		
Yes		
No	39	67.2
	19	32.8
Medical history of the husband: presence of any medical disease		
Yes	33	56.9
No	25	43.1
Medical history of the children: presence of any chronic disease		
Yes	8	13.8
No	50	86.2
Housing condition		
Suitable	48	82.8
Not suitable	10	17.2
Income		
Enough	35	60.3
Not enough	23	39.7
Others live in the same house		
None	52	89.6
Mother	3	5.2
Mother in low	3	5.2
Residence		
Rural	26	44.8
Urban	32	55.2

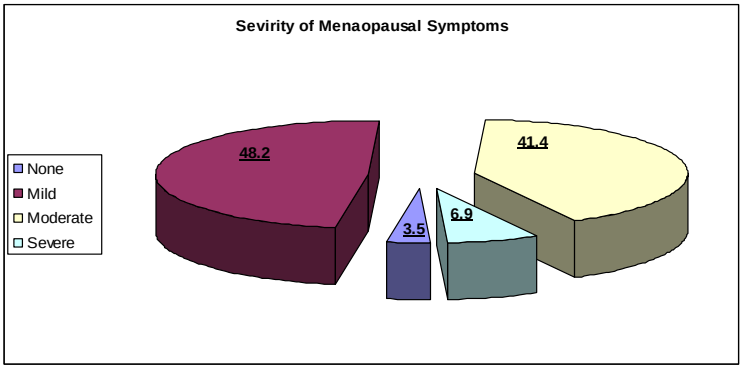

Figure 1: Distribution of the study subjects according to severity of menopausal symptoms

Table 2: Relation between the Severity of the Menopausal Symptoms and Quality of Life scores

Items of the Menopause Rating Scale	Quality of life scores			
	No.	**%**	**Mean**	**S.D**
Psychological Symptoms				
None	4	6.9	94.50	11.475
Mild	12	20.7	88.42	10.983
Moderate	28	48.3	82.89	9.878
Severe	14	24.1	62.64	12.549
Somatic Symptoms				
None	2	3.5	88.00	11.314
Mild	25	43.1	87.80	13.273
Moderate	15	25.9	70.73	14.830
Severe	16	27.5	75.31	11.026
Urogenital Symptoms				
None	22	37.9	83.14	12.104
Mild	25	43.1	81.36	16.309
Moderate	9	15.5	70.78	14.359
Severe	2	3.5	68.50	12.021
Total score				
None	2	3.5	88.00	11.314
Mild	28	48.2	88.04	10.875
Moderate	24	41.4	72.33	14.589
Severe	4	6.9	65.00	5.292
Total	**58**	**100.0**	79.95	14.836

Table 3: Distribution of the study subjects according to their demographic characteristics and mean score of quality of life.

Demographic characteristics	Quality of Life Score				
	No.	Mean	S.D	F	P
Age					
45-	15	83.33	18.345	0.95	**0.39**
50-	17	76.18	12.958		
55	26	80.46	13.753		
Marital status					
Married	41	80.63	14.747	0.49	**0.61**
Divorced	6	74.17	21.010		
Widowed	11	80.55	11.903		
No. of living children					
None	5	75.20	11.520	2.753	**0.028 ***
1-	3	95.00	9.539		
2-	21	84.14	13.101		
3-	17	80.41	13.537		
4**+**	12	73.11	12.858		
Medical History of women: presence of any chronic disease				4.39	**0.041 ***
Yes	39	77.18	14.716		
No	19	85.63	13.753		
Medical history of the husband: presence of any medical disease				0.004	**0.95**
Yes	33	80.06	15.476		
No	25	79.80	14.262		
Medical history of the children: presence of any chronic disease				0.02	**0.891**
Yes	8	80.63	13.330		
No	50	79.84	15.185		
Housing condition				29.59	**< 0.001***
Suitable	48	83.90	12.133		
Not suitable	10	61.00	11.972		
Income				24.99	**< 0.001***
Enough	35	86.57	10.987		
Not enough	23	69.87	14.414		
Others live in the same house				2.85	**0.067**
None	52	81.40	14.313		
Mother	3	63.00	18.193		
Mother in low	3	71.67	11.372		
Residence				0.49	**0.485**
Rural	26	78.42	13.822		
Urban	32	81.19	15.720		
Total	58	79.95	14.836		

Table 4: Correlation between severity of menopausal symptoms and quality of life domains

QOL Domains	Psychological symptoms	Somatic symptoms	Urogenital symptoms
Physical and marital well-being.	- 0.456* (0.001)	- 0.242 (0.067)	- 0.347* (0.008)
Relations with others	- 0.13 (0.33)	0.134 (0.316)	- 0.077 (0.568)
Social, community, and civic activities	- 0.365* (0.005)	- 0.4* (0.002)	- 0.219 (0.099)
Personal development and fulfillment	- 0.457* (< 0.001)	- 0.417* (0.001)	- 0.431* (0.001)
Recreation	- 0.424* (0.001)	- 0.336* (0.01)	- 0.56 (0.677)
Independence	- 0.137 (0.304)	- 0.069 (0.605)	- 0.025 (0.851)

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