

**RESEARCH ARTICLE**

## A Study on Assessment of Quality of Life in Post Menopausal Women

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**ABSTRACT:**

**OBJECTIVE:** Menopause is defined retrospectively as the time of the final menstrual period, followed by 12 months of amenorrhea. Menopause is caused by the aging of ovaries leading to a decline in the production of ovarian gonadotropins oestrogen and progesterone. The deficiency of these hormones elicits various somatic, vasomotor, sexual, and psychological symptoms that impair the overall quality of life (QoL) of women. Hence the study was done to assess the effect of postmenopausal symptoms and their impact on women's quality of life.

**METHODOLOGY:** A cross sectional study was done for the duration of six months in Employee State Insurance Corporation Hospital. The data such as the socio-demographic information and the menstruation status and the experience of the symptoms, as were tested in the Menopause Specific Quality of Life (MENQOL) questionnaire, were collected from each patient. The women who were included in the study were divided into two groups as the early postmenopausal and the late postmenopausal groups. All statistical analyses were carried out using Graph Pad Prism 7.1. A p-value of less than 0.05 was considered to be statistically significant.

**RESULTS:** A total of 200 patients met the inclusion criteria. Among the patients psychosocial symptoms were more prominent among early menopausal women when compared to late menopausal women. The vasomotor symptoms (72%), psychosocial symptoms (39.5%), physical symptoms (50.5%), sexual symptoms (26%) were prevalent and showed significance in both groups of post-menopausal women.

**CONCLUSION :** The age of the postmenopausal women was not proportional to any symptomatic changes to women. Among categorized symptoms of postmenopausal women in MENQOL Questionnaire, physical symptoms (low back ache, joint pain etc.), vasomotor symptoms (eg hot flushes etc.), psychosocial (poor memory etc.) were prevalent and shown to have negative effect on quality life of the post-menopausal women.

**KEYWORDS:** post menopause, Quality of life, menopause, early post-menopause, late post-menopause.

**INTRODUCTION:**

Menopause is defined retrospectively as the time of the final menstrual period, followed by 12 months of amenorrhea.<sup>(1)</sup> It is one of the most significant events in a woman's life and brings in a number of physiological changes that affect the life of a woman permanently. The menopausal experience involves a multifaceted interaction between psychological sociocultural, and environmental factors, as well as the biological changes relating to altered ovarian hormone status or deficiency.<sup>(2, 3)</sup>

Menopause is caused by the aging of ovaries leading to a decline in the production of ovarian gonadotropins oestrogen and progesterone.<sup>(4)</sup> The deficiency of these hormones elicits various somatic, vasomotor, sexual, and psychological symptoms that impair the overall quality of life (QOL) of women.<sup>(5)</sup> The psychosocial, physical and vasomotor menopausal symptoms are strongly associated with QOL for both early and late menopausal women respectively.<sup>(6)</sup> It is well documented that every menopausal symptoms and socio-demographic characteristics have effect on QOL of menopausal women.<sup>(7,8)</sup> Hence the study was done to assess the effect of postmenopausal symptoms and their impact on women's quality of life.

**MATERIALS AND METHODS:**

This research work was carried out in Employee State Insurance Corporation Hospital, Department Of General Medicine and Department of obstetrics& gynecology Aynavaram, Chennai. A crosssectional study was done for the duration of six months to assess the quality of life in postmenopausal women using MENQOL questionnaire<sup>9</sup>. Inclusion and exclusion criterion were predevised before subject recruitment, inclusion criteria Women of age between 40-70 years are included in the study. The women who were undergoing treatment for serious diseases like cancer, women who were in remission, who had history of drug or alcohol abuse and who were on hormone replacement therapy were excluded from the study. Pregnant women, lactating women were excluded. The women who were included in the study were divided into two groups, early post menopause and the late post menopause groups. The women who were above the age of 40 years and the women whose last menstrual period occurred 12 months were categorized as the post menopause (PM) group. The postmenopausal women who attained menopause 5 years were classified as the early post-menopausal group, while those who had attained

menopause >5 years were classified as the late postmenopausal group. The number of patients included the study were n=200. The Chi square test and the relative risk were applied to compare the frequencies of the symptoms among the women with different menopausal statuses. All statistical analyses were carried out using Graph Pad Prism 7.1. A p-value of less than 0.05 was considered to be statistically significant.

**RESULTS:**

**Table 1-Age Based Population Distribution**

S.No	Age in years	Population (n=200)	Population percentage (%)
1	40-45	43	21.40
2	46-50	52	25.80
3	51-55	30	15.20
4	56-60	40	20.20
5	61-65	35	17.40

**TABLE 2-MENOPAUSAL STATUS**

SNO	MENOPAUSAL STATUS	POPULATION	POPULATION PERCENTAGE (%)
1	EMP	80	40.10
2	LMP	120	59.90

**TABLE 3-PREVALANCE OF POSTMENOPAUSAL SYMPTOMS IN POPULATION**

SNO	SYMPTOMS	EMP		LMP		In 2 groups		Total symptoms Percentage (%)
		n=80	Mean score	n=120	Mean score	n=200	Mean score	
1	Hot flushes	37	3.26	77	3.22	102	3.24	57.1%
2	Night sweats	43	2.9	54	3.17	108	2.91	54%
3	Sweating	42	2.6	45	3.01	99	2.8	49.5%
4	Dissatisfaction with personal life	33	3.4	59	3.57	84	3.48	42.0%
5	Feeling anxious or nervous	57	2.92	83	3.41	134	2.91	67.0%
6	Poor memory	51	3.07	80	3.25	127	3.12	63.5%
7	Accomplishing less than used to	43	3.07	63	3.01	102	3.13	51%
8	Feeling depressed	45	3.07	74	3.51	114	3.41	57%
9	Being impatient with other people	43	3.33	71	3.2	116	3.26	58%
10	Feeling of wanting to be alone	24	3.14	37	3.41	61	3.15	30.5%
11	Flatulence or Gas pains	24	3.20	36	2.93	61	3.04	30.5%
12	Aching in the muscles and joints	62	3.26	94	3.76	154	3.51	77.2%
13	Feeling tired or worn out	61	3.20	87	3.33	144	3.27	72%
14	Difficulty in sleeping	39	3.51	61	3.81	100	3.65	50%
15	Aches in back of neck or head	58	3.59	86	3.53	142	3.41	71%
16	Decrease in physical strength	36	2.62	50	3.10	91	2.72	45.5%
17	Decrease in stamina	51	3.18	68	2.66	122	2.88	61%
18	Lack of energy	52	3.27	78	3.08	129	3.17	64.5%
19	Dry skin	26	2.15	35	2.5	54	2.33	27.1%
20	Weight gain	13	2.7	20	2.63	30	2.7	15%
21	Increased facial hair	28	3.11	37	2.7	63	2.86	31.5%
22	Changes in appearance, texture or tone of skin	26	2.66	34	3.10	57	2.88	28.5%
23	Feeling bloated	25	2.71	49	3.12	72	2.93	36%
24	Low back ache	61	3.69	95	3.92	158	3.80	79%
25	Frequent urination	36	3.22	51	3.68	87	3.41	43.5%
26	Involuntary urination when laughing or coughing	13	2.75	20	3.33	38	3.21	19%
27	Decrease in my sexual desire	28	1.6	74	2.10	102	1.84	51%
28	Vaginal dryness	09	.71	11	3.25	22	3.01	11%
29	Avoiding intimacy	35	1.57	81	1.66	26	2.628	13%

**TABLE- 4-PREVALENCE OF POST MENOPAUSAL SYMPTOMS IN RELATION TO AGE IN POPULATION**

Age of study population	Vasomotor symptoms		Psychosocial symptoms		Physical symptoms		Sexual symptoms	
	Present	Absent	Present	Absent	Present	Absent	Present	Absent
> 50 years	70	21	86	05	89	01	72	19
50years	91	18	101	08	109	01	92	17
RR	0.922		1.020		0.997		0.937	
P- value	0.2838		0.7751		>0.9999		0.3598	

**TABLE- 5-PREVALENCE OF SYMPTOMS IN 2 SUB GROUPS**

SNO	SYMPTOMS	EARLY MENOPAUSAL STAGE		LATE MENOPAUSAL STAGE	R Rvalue	p-value
1	Vasomotor	Present	64	16	3.429	<0.0001
		Absent	28	92		
2	Psychosocial	Present	75	04	22.97	<0.0001
		Absent	05	116		
3	Physical	Present	79	22	4.829	<0.0001
		Absent	23	119		
4	Sexual	Present	33	19	1.053	0.827
		Absent	13	12		

**DISCUSSION:**

The total number of patients included in the study based on their inclusion/exclusion criteria was found to be 200. The susceptibility to Post menopause was found to be common in the age range 46-50 years the mean menopausal age was found to be 51.5 years among the study population. (TABLE1). The postmenopausal status of the women were classified into two groups early postmenopausal state (EMP) 40.10% and late postmenopausal state (LMP) 59.90% (TABLE 2). Illustrates the severity of the menopausal symptoms among the studied subjects. It can be observed that, the most severe symptoms of vasomotor, psychosocial, physical and sexual domains were, Low backache (79.1%), Aching in muscles and joints (77%), Feeling tired or worn out (72%), experiencing poor memory (63.5%), hot flushes (57.0%), and change in their sexual desire (51.1%) (TABLE 3). The psychosocial symptoms were more prominent among early menopausal women when compared to late menopausal women .The vasomotor symptoms (72%), psychosocial symptoms (39.5%) physical symptoms (50.5%), sexual symptoms (26%) were prevalent in both groups of post-menopausal women. Prevalence of post-menopausal symptoms in relation to age was calculated using Chi Square test. It was found that the age in comparison to the symptoms has not shown any significant difference (P<0.05) in the post-menopausal women, so the age was not proportional to any symptomatic changes to postmenopausal women. (TABLE 4, 5).

On overview of the study population results inferred that vasomotor, physical and psychosocial symptoms were more prevalent and shows significant effect in post-menopausal women.

**CONCLUSION:**

Based on this research work it can be concluded that the age of the postmenopausal women was not proportional to any symptomatic changes to women. Among categorised symptoms of postmenopausal women in MENQOL Questionnaire, physical symptoms (low back ache, joint pain etc.,) vasomotor symptoms (eg hot flushes etc.), psychosocial (poor memory etc.,) were prevalent and shown to have negative effect on quality life of the post-menopausal women. These types of studies can help in creating awareness and also in helping in educating women regarding an early identification of the common menopausal symptoms to improve their quality of life.

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