

# Comparison of quality of life in premenopausal and postmenopausal women

Nidhi Kashyap

Lecturer, Banarsidas Chandiwala Institute of Physiotherapy, Kalkaji, Delhi

## Abstract

**Background & Objective:** Women in her lifecycle goes through pre, peri and post menopausal phases. During these phases there is a profound change in their quality of life. Quality of life is determined by physical health, psychological health, social relationship and environmental factors. This study aimed to compare effect on Quality of life between premenopausal and postmenopausal women.

**Methods:** 60 women were taken for this study of which 30 women were in the premenopausal and 30 women were in the postmenopausal phase. All subjects were asked to fulfill WHOQOL-BREF questionnaire which evaluated women for physical, psychological, social and environmental well being.

**Results:** The results showed that 30% women's perception in Premenopausal period about their overall quality of life is very good as compared to just 6.67% of women's perception in Postmenopausal period. Health satisfaction status is better in premenopausal group where 13.3% of women are satisfied with their health status as compared to just 3.3% in postmenopausal period. The mean score in physical health domain for premenopausal women is  $61.4 \pm 8.49$  as compared to  $53.23 \pm 9.99$  in the postmenopausal period. The Premenopausal (mean score  $65.66 \pm 9.67$ ) have better psychological health than postmenopausal women (mean score  $58.63 \pm 10.68$ ). Also there is better social life and adjusting ability in physical environment during premenopausal period as compared to postmenopausal period.

**Conclusion:** Based on the findings of the study it is concluded that quality of life in premenopausal women is better as compared to postmenopausal women.

**Keywords:** Premenopause, Postmenopause, Quality of Life.

## Introduction

Quality of life is a multidimensional health concept that is a mainly subjective and may influence the sense of well being and day to day function. The menopause is a physiological event that occurs in all women living beyond the age of 60 years. Postmenopause is usually determined by 12 months of amenorrhea of complete lack of monthly menstruation<sup>1</sup>. During climacteric, ovarian activity declines. Initially ovulation fails, no corpus luteum forms and no progesterone is secreted by the ovary. Later the graafian follicles also fail to develop, estrogenic activity is reduced and endometrial atrophy leads to amenorrhea<sup>2</sup>. Loss of estrogen often

causes physiological changes including hot flushes, irritability, fatigue, anxiety, various psychotic changes decreased strength and calcification of bones<sup>3</sup>. It is found that women who experience a long Perimenopausal have a high risk of depression<sup>4</sup>. Other changes during Postmenopausal includes lean body mass, increase in the fat mass<sup>5</sup>, atrophic changes in estrogen target organs such as breasts, uterus, ovaries and vulva<sup>6</sup>. These symptoms in the Postmenopausal period may affect the quality of life of women adversely. Menopausal women who are physically active, have a better postural stability than those who are not<sup>7</sup>. Thus there is a need to compare quality of life between Pre and Post Menopausal women so that early counseling and physiotherapy plan can be implemented.

## Methodology

Sixty women were included in this study. 30 women were in Premenopausal period and 30

## Reprints Requests: Nidhi Kashyap

Lecturer, Banarsidas Chandiwala Institute of Physiotherapy, Kalkaji, Delhi

(Received on 27.7.09, accepted on 12.08.09)

in Postmenopausal period. The women were selected from Banarsidas Chandiwala Institute of Medical Sciences and adjacent areas.

Women were in the age group of 40-65 years with Premenopausal women having regular menstruation and Postmenopausal women who have not menstruated within previous 12 months. The mean body weight (in Kg) of premenopausal women was  $61.4 \pm 2.7$  and that of postmenopausal women was  $63.8 \pm 1.6$ . To find the mental status, Mini Mental State Examination was done and all women scored in the normal range, with the mean score of 28. Women with serious health problems such as fractures, neurological, gynaecological and psychiatric disorders were excluded from the study. Also, women with surgically induced menopause and women taking hormonal therapy were excluded. A questionnaire known as World Health Organization Quality of Life - BREF (WHOQOL-BREF) was used. The questionnaire was divided into four domains - Physical health domain, psychological domain,

social & environmental domains. It consists of 26 questions of objective type.

The questionnaire properly explained to the women and instructions were given to them to answer the questions. The responses thus obtained were recorded. Results The results showed that 30% women's perception in Premenopausal period about their overall quality of life is very good as compared to just 6.67% of women's perception in Postmenopausal period. Health satisfaction status is better in premenopausal group where 13.3% of women are satisfied with their health status as compared to just 3.3% in postmenopausal period. The mean score in physical health domain for premenopausal women is  $61.4 \pm 8.49$  as compared to  $53.23 \pm 9.99$  in the postmenopausal period. The Premenopausal (mean score  $65.66 \pm 9.67$ ) have better psychological health than postmenopausal women (mean score  $58.63 \pm 10.68$ ). Also there is better social life and adjusting ability in physical environment during premenopausal period as compared to postmenopausal period.

**Tabel 1. Subject's overall perception about Quality Of Life**

	NUMBER OF SUBJECTS	GRADING				
		5 VERY GOOD	4 GOOD	3 NPNG	2 POOR	1 VERY POOR
PRE	30	9	16	5	0	0
POST	30	2	14	9	1	0

Pre-premenopausal

Post-postmenopausal

Npng-neither poor nor good

**Tabel 2. Subject's overall perception about their Health Status**

	NUMBER OF SUBJECTS	GRADING				
		5 VS	4 S	3 NSND	2 DS	1 VDS
PRE	30	4	15	11	0	0
POST	30	1	9	12	1	0

Pre-premenopausal

Post-postmenopausal

Vs-very satisfied

S-satisfied

NSND-neither,satisfied nor dissatisfied

DS-dissatisfied

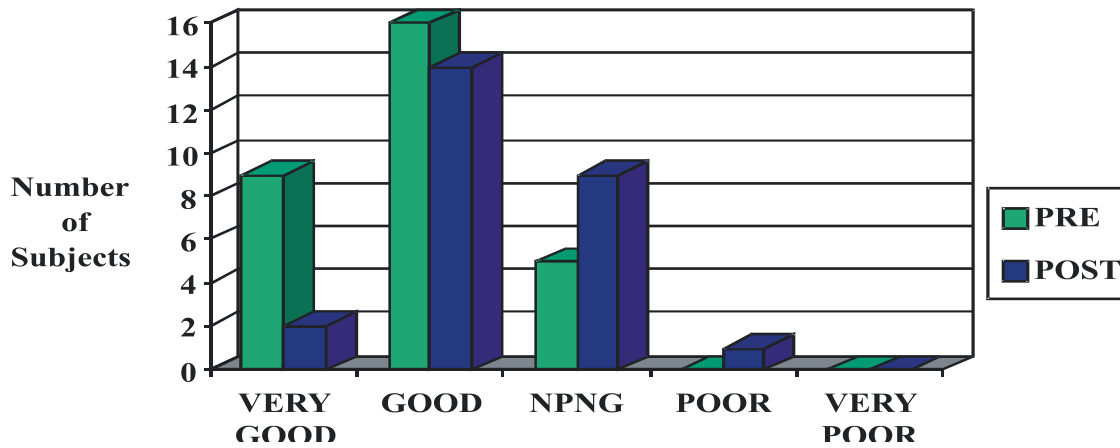
VDS-very dissatisfied

**Table 3. Comparison of Pre & Post Menopausal physical health domain, psychological health domain, social relationship domain and environmental domain**

VARIABLE	PRE	POST	MEAN DIFFERENCE
	X(S.D.)	X(S.D.)	
PHYSICAL	61.4+8.49	53.23+9.99	8.17
PSYCHOLOGICAL	65.66+9.67	58.63+10.68	7.03
SOCIAL	78.8+13.7	62.63+15.09	16.17
ENVIRONMENTAL	75.4+12.59	70.2+13.96	5.21

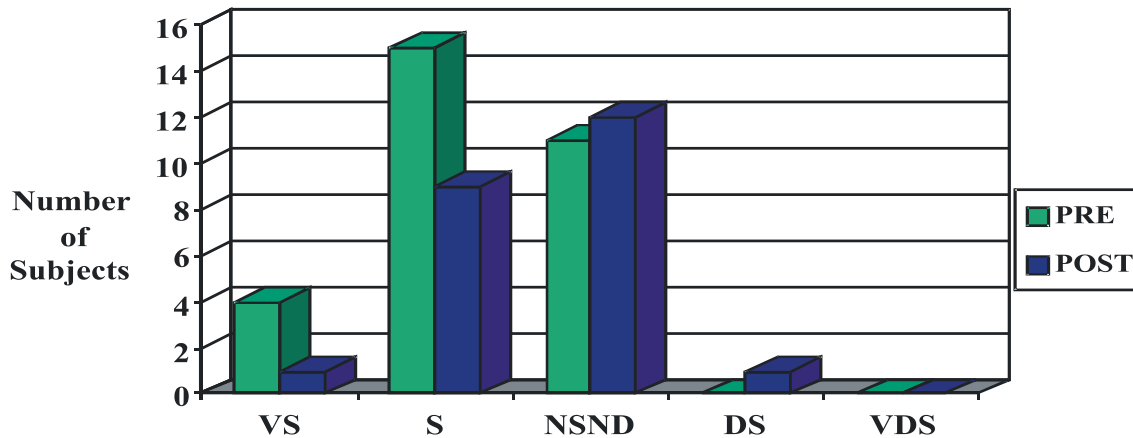
Pre-premenopausal, Post-postmenopausal

**Figure 1. Graphical representation of subject's pre & post menopausal quality of life**



Pre-premenopausal, Post-postmenopausal, NPNG-neither poor nor good

**Figure 2. Graphical representation of Subject's Pre & Post Menopausal Health Status**



Pre-premenopausal

Post-postmenopausal

VS-very satisfied

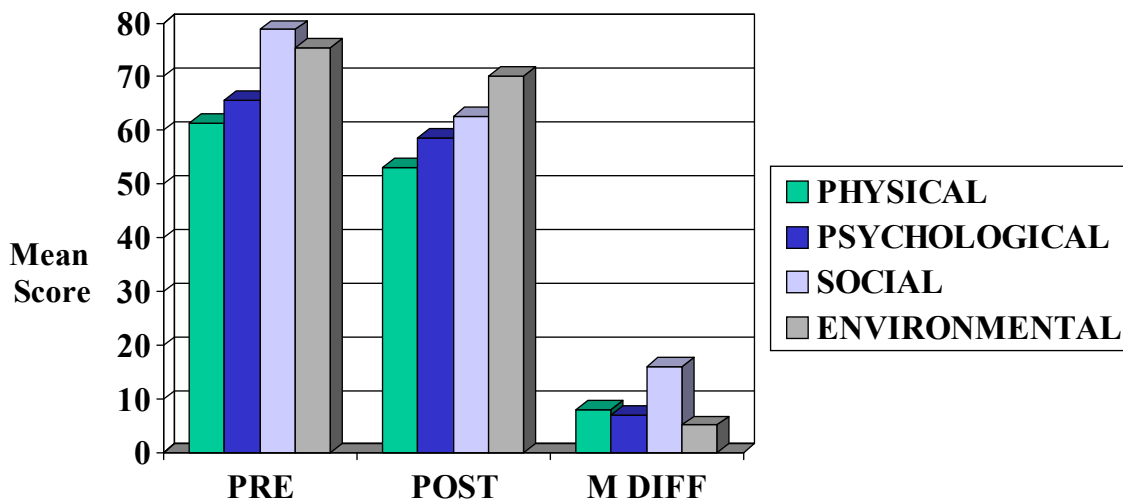
S-satisfied

NSND-neither satisfied nor dissatisfied

DS-dissatisfied

VDS-very dissatisfied

**Figure 3. Graphical comparisons between scores of different domains**



Pre-premenopausal

Post-postmenopausal

M diff-mean difference

### Discussion

This study has proved that quality of life in premenopausal women is better than postmenopausal women. The poorer physical role function for postmenopausal women may be associated with estrogen deficiency. There are several symptoms associated to estrogen deficiency which affects physical health such as joint aches, incontinence, osteoporosis and skin changes. These findings are validated by a study done by Duqan SA et al, to examine whether menopausal status is associated with musculoskeletal pain. Results showed that prevalence of aches and pains were high with one in six women reporting daily symptoms. Compared to premenopausal women those who were postmenopausal reported significantly more aches and pains. They concluded that there is an association between pain and menopausal status, with postmenopausal women experiencing greater pain symptoms than premenopausal women<sup>8</sup>. Compromised psychological well being during menopausal transition have long been noted<sup>9</sup>. Women often have a depressed mood accompanied by feeling of worthlessness, anxiety, fatigue, loss of drive, pains and headaches. These symptoms can be attributed to the decreased serotonin activity. Gonadal steroids appeared to affect brain systems known

to mediate depression and anxiety on multiple levels. Estrogens exert an agonist affect on serotonergic activity by increasing number of serotonergic receptors and the transport and update of neurotransmitter. They also increase synthesis of serotonin<sup>10</sup>. The overall change in physical and psychological health affects the social functioning. This is supported by a study done by Deeks AA et al. They investigated how menopausal stage accounted for women's feeling about their purpose in life, self-acceptance and social role. They found that who were postmenopausal did not feel as positive about their role in life as premenopausal women. This also indicates a decline in their social functioning<sup>11</sup>. A study done by Kumari M et al, to examine change in health functioning as the women progress through menopausal transition concluded that menopausal transition is associated with decreased health functioning. Menopausal symptoms are strongly related to all aspects of health functioning with most effect on socio-economic role<sup>12</sup>. The decrease in the environmental awareness can be due to decrease in physical health psychological health and decline in social role functioning. Thus this study showed that overall quality of life in all domains is higher in premenopausal women as compared to postmenopausal women. It is recommended that future studies should be conducted on whether early counseling and physical therapy can improve quality of life of postmenopausal women.

## Conclusion

The study has shown that quality of life is better in premenopausal women as compared to postmenopausal women. Significance difference

is in physical health and social relationship. Thus it can be said that menopause leads to deterioration in quality of life.

**WHOQOL-BREF** The following questions ask how you feel about your quality of life, health or other areas of your life. I will read out each

question to you along with the response options. Please choose the answer that appears most appropriate.

		Very poor	Poor	Neither poor nor good	Good	Very Good
1.	How would you rate your quality of life?	1	2	3	4	5

		Very dissatisfied	Dissatisfied	Neither satisfied nor dissatisfied	Satisfied	Very satisfied
2.	How satisfied are you with your health?	1	2	3	4	5

		Not at all	A little	A moderate amount	Very much	An extreme amount
3.	To what extent do you feel that physical pain prevents you from doing what you need to do?	5	4	3	2	1
4.	How much do you need any medical treatment to function in your daily life?	5	4	3	2	1
5.	How much do you enjoy life?	1	2	3	4	5
6.	To what extent do you feel your life to be meaningful?	1	2	3	4	5

		Not at all	A little	A moderate amount	Very much	Extremely
7.	How well are you able to concentrate?	1	2	3	4	5
8.	How safe do you feel in your daily life?	1	2	3	4	5
9.	How healthy is your physical environment?	1	2	3	4	5

		Not at all	A little	Moderately	Mostly	Completely
10.	Do you have enough energy for everyday life?	1	2	3	4	5
11.	Are you able to accept your bodily appearance?	1	2	3	4	5
12.	Have you enough money to meet your needs?	1	2	3	4	5
13.	How available to you is the information that you need in your day-to-day life?	1	2	3	4	5
14.	To what extent do you have the opportunity for leisure activities?	1	2	3	4	5

		Not at all	A little	Moderately	Mostly	Completely
10.	Do you have enough energy for everyday life?	1	2	3	4	5
11.	Are you able to accept your bodily appearance?	1	2	3	4	5
12.	Have you enough money to meet your needs?	1	2	3	4	5
13.	How available to you is the information that you need in your day-to-day life?	1	2	3	4	5
14.	To what extent do you have the opportunity for leisure activities?	1	2	3	4	5

		Very poor	Poor	Neither poor nor good	Good	Very Good
15.	How well are you able to get around?	1	2	3	4	5

		Very dissatisfied	Dissatisfied	Neither satisfied nor dissatisfied	Satisfied	Very satisfied
16.	How well are you able to get around?	1	2	3	4	5
17.	How satisfied are you with your ability to perform your daily living activities?	1	2	3	4	5
18.	How satisfied are you with your capacity for work ?	1	2	3	4	5
19.	How satisfied are you with yourself?	1	2	3	4	5
20.	How satisfied are you with your personal relationships?	1	2	3	4	5
21.	How satisfied are	1	2	3	4	5

		Never	Seldom	Quite often	Very often	Always
26.	How often do you have negative feeling such as blue mood, despair, anxiety, depression?	5	4	3	2	1

## References

1. Sevgi Ozkan, Mehmet Zencin. Women's quality of life in premenopausal and postmenopausal periods. *Quality of life research*,2005 ;14(8):1795-1801.
2. VG Padubidri, Shirish N Daftary . Shaw's Textbook of Gynaecology, 13<sup>th</sup> edition, Ch 5:56-66.2004
3. Kuh DL, Wadsworth, Hardy R. Women's health in midlife. *British Journal of Obstetric Gynaecology*,1997 ; 104 (8):923-933.
4. R Sapsford, S Markwell .Women's health, Ch 25:311-318.1998.
5. Ozlem, N Soran. Quality of life in postmenopausal women. *Turkish Journal of physical medicine and rehabilitation*,2007; 53:61-64.
6. Landis CA. Menopause. *Nursing Clinical North America*,2004 ;39:97-115.
7. Geeta Mishra. Perceived change in quality of life during menopause. *Social Science Medical*,2006 ; 62(1):93-102.
8. Duqan et al. Quality of life assessment in dwelling middle aged women. *Climacteric.*,2005;8:146-153.
9. J-L. Fuh, S-J. Wang, S-L. Lu, K.D Juang. Quality of life and menopausal transition for middle aged women on Kinmen Island. *Quality of Life Research*,2003; 12:53-61.
10. Cihangir, Derya. Quality of life and postmenopausal symptoms among women. *Gynaecological endocrinology*,2007; 23(7).
11. Deeks AA, Mc cabe MP . Well being and menopause. *Quality life research.*,2004; 13(2):389-98.
12. Kumari M, Weineck J. Quality of life of rural menopausal women. *Journal of Advanced Nursing*,2002; 54(1):11-19.