



## ASSESSMENT OF QUALITY OF LIFE IN POST-MENOPAUSAL WOMEN

## Physiotherapy

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## ABSTRACT

Menopause, also known as the climacteric, is the time in most women's lives when menstrual periods stop permanently. During this time, women often experience hot flashes; associated with shivering, sweating, and reddening of the skin. Hot flashes often stop occurring after a year or two. Other symptoms may include vaginal dryness, trouble sleeping, and mood changes. So this study was to find out quality of life in post-menopausal women using Short Form 36 Health Survey (SF-36). Total 100 women in the age group between 45 to 60 years of age who fell in Post-menopausal phase were screened for the study. The questionnaire was collected from them and the score of each patient was noted, analyzed and conclusions were made. According to the study, the women attain menopause around 52 years of age. It can also be stated that menopause causes decrease in quality of life in most women.

## KEYWORDS

Menopause, Quality of life, SF-36

## INTRODUCTION

Menopause, also known as the climacteric, is the time in most women's lives when menstrual periods stop permanently<sup>1</sup>. Post-menopause is the time after a woman's menstrual periods have ceased for 12 consecutive months. All women experience these natural changes differently, so there is a wide age range at which women first become postmenopausal. Natural post-menopause usually occurs sometime between a woman's late 40s and early 60s, with the average postmenopausal age being 51 years old<sup>2</sup>.

Before menopause, a woman's periods typically become irregular, which means that periods may be longer or shorter in duration or be lighter or heavier in the amount of flow. During this time, women often experience hot flashes; these typically last from 30 seconds to ten minutes and may be associated with shivering, sweating, and reddening of the skin<sup>3</sup>. Hot flashes often stop occurring after a year or two. Other symptoms may include vaginal dryness, trouble sleeping, and mood changes. The severity of symptoms varies between women<sup>4</sup>.

Menopause is usually a natural change<sup>5</sup>. It can occur earlier in those who smoke tobacco. Other causes include surgery that removes both ovaries or some types of chemotherapy<sup>6</sup>. At the physiological level, menopause happens because of a decrease in the ovaries' production of the hormones estrogen and progesterone<sup>7</sup>. While typically not needed, a diagnosis of menopause can be confirmed by measuring hormone levels in the blood or urine<sup>7</sup>. Menopause is the opposite of menarche, the time when a girl's periods start<sup>8</sup>.

Postmenopausal women are at greater risk for heart disease, so redirect your diet toward low-fat foods and lower your salt intake — this reduces the risk of heart attack and atherosclerosis, a condition in which plaque (cholesterol and other fats) builds up on the insides of the arteries.

As part of their routine check-ups, they should have a blood test at a minimum of every five years until age 50, and then at regular intervals. The doctor will recommend what that interval should be based on how high their cholesterol is and on other cardiovascular risk factors that they may have, such as hypertension or obesity.

The Short Form (36) Health Survey is a 36-item, patient-reported survey of patient health. The SF-36 is a measure of health status. The original SF-36 came out from the Medical Outcome Study, MOS, done by the RAND Corporation. Since then a group of researchers from the original study released a commercial version of SF-36 while the

original SF-36 is available in public domain license free from RAND Corporation.

- The Short Form (36) ie; SF-36 Health Survey is a 36-item, patient-reported survey of patient health. The SF-36 consists of eight scaled scores, which are the weighted sums of the questions in their section.

## The eight sections are:

- vitality
- physical functioning
- bodily pain
- general health perceptions
- physical role functioning
- emotional role functioning
- social role functioning
- mental health

Thus using SF-36 we can assess the quality of life in post-menopausal women<sup>9</sup>.

## Uses of SF-36 Health Survey are:-

- 1) Evaluating individual patients health status
- 2) Researching the cost-effectiveness of a treatment
- 3) Monitoring and comparing disease burden

## PROCEDURE

The ethical approval was taken from the committee. Women in the age group between 45 to 60 years of age who fell in Post-menopausal phase were screened for the study. Those women who fulfilled the inclusion criteria were selected for the study. The inclusion criteria were Females above the age of 45 to 60 years, and both Working and non-working women. The women with history of major trauma to hip, knee or ankle, women who undergone any surgery of lower limb, and women with mental or physical handicap were excluded from the study.

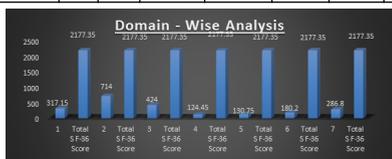
Aims of the survey was explained to them. Written consent form were taken from the subject prior to the study. Proper guidance and explanation about SF-36 Questionnaire was given to the subjects and was administered as per participant's convenience. They were asked to mark the questionnaire or the investigator marked the questionnaire in case of difficulty. The questionnaire was collected from them in half an hour or so and the score of each patient was noted, analysed and conclusion were made. The questionnaire which was collected from the subjects was then analysed and categorized into seven domains as mentioned below :-

Domain	Questions	Score
1	1,2,11	600
2	3	1000
3	4,5	700
4	6,10	200
5	7,8	200
6	9(a,c,g,i)	400
7	9(b,c,d,f,h)	500
<b>Total SF-36 Score</b>		<b>3600</b>

**DATA ANALYSIS AND INTERPRETATION**



Domain	1	2	3	4	5	6	7	Total SF-36 Score
Average	317.15	714	424	124.45	130.75	180.2	286.8	2177.35



**DISCUSSION**

The goal of this study was to assess the quality of life in post-menopausal women. The Short Form (36) i.e.; SF-36 method was used to conduct survey. Sample size was 100. SF-36 Health Survey is a 36-item, patient-reported survey of patient health. It consists of eight scaled scores, which are the weighted sums of the questions in their section. The eight sections are:

Vitality, physical functioning, bodily pain, general health perceptions, physical role functioning, emotional role functioning, social role functioning and mental health According to studies, post-menopausal quality of life is affected by various potential confounders such as physical activity, social demographics, some dietary habit like smoking, tobacco use, alcohol consumption, altered BMI and various psychological changes.

Most severe symptoms of vasomotor, psychosocial, physical and sexual domains were, hot flushes, poor memory, and dissatisfaction with personal life, low backache, and change in sexual desire. While the mean scores of each domain suggest that menopausal symptoms were associated with decrease in women quality of life.

It can also be stated that menopause causes decrease in quality of life and there is a positive correlation between menopausal symptoms & quality of life.

Survey was conducted and the participants were told to rate their experience. A total of eleven parameters were used to assess the quality of life in post-menopausal women. These parameters had 36 sub questions each of 100 score. They were further scored into seven domains as follows:-

Domain	Questions	Score
1	1,2,11	600
2	3	1000
3	4,5	700
4	6,10	200
5	7,8	200
6	9(a,c,g,i)	400
7	9(b,c,d,f,h)	500
<b>Total SF-36 Score</b>		<b>3600</b>

Data thus obtained, was analysed and presented in the form of graphs and tables.

The maximum score in SF – 36 Survey is 3600 (36questions \*100 score). The average Total SF – 36 Score was 2177.35.

Pie Chart was created using the data from masterchart. The average score of seven domains were used as reference for this purpose. Pie

Chart was used to represent Domain: Total SF-36 Scoreratio i.e. the contribution of each domain to the Total SF-36 score. Thus the following observations were seen from the Pie Chart:- Domain 1 constituted 15% of the Total SF-36 score. Domain 2 constituted 33% of the Total SF-36 score. Domain 3 constituted 19% of the Total SF-36 score. Domain 4 constituted 6% of the Total SF-36 score. Domain 5 constituted 6% of the Total SF-36 score. Domain 6 constituted 8% of the Total SF-36 score. Domain 7 constituted 13% of the Total SF-36 score.

Clustered Column Chart was created using the data from masterchart. The average score of seven domains were used as reference for this purpose. Clustered Column Chart was used to compare values of seven domains and the Total SF-36 Score. Clustered Column Chart displays data using rectangular bars where the length of the bar is proportional to the data value. A pictorial analysis can be made by comparing each domain with the Total SF-36 Score.

Here average values of Domains and Total SF-36 Score was used.

Following observations can be made from the data:- The average age a women attained menopause as per this study is around 52 years. (52.73) The average Total SF-36 Score is 2177.35. The average score of Domain 1 is 317.15. The average score of Domain 2 is 714. The average score of Domain 3 is 424. The average score of Domain 4 is 124.45. The average score of Domain 5 is 130.75. The average score of Domain 6 is 180.2. The average score of Domain 7 is 268.8

**CONCLUSION**

The study concludes that there are eleven major parameters that can be used to ascertain quality of life in post-menopausal women. As per this survey conducted on 100 women, it can be concluded that Domain 2 (33%) is the major contributor to Total SF-36 Score, followed by domains 3 (19%), 1 (15%), 7 (13%), 6 (8%), 5 (6%) & 4 (6%).

According to the study, women attain menopause around 52 years of age. It can also be stated that menopause causes decrease in quality of life in most women.

**FUTURE SCOPE**

A study can be carried out to compare quality of life in females who have undergone hysterectomy thus causing surgical menopause to the females who have naturally reached it.

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