

# A Study to Assess the Effectiveness of Deep Breathing Exercises On Menopausal Symptoms among Menopausal Women in Selected Area of District Solan, Himachal Pradesh

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**Abstract:** *Background: Menopause is one of the difficult phases in the life of a woman. Today's women are assumed to spend one third of life in postmenopausal phase and significant number of women link the physical changes of old age with menopause. The health of women during menopause is the accumulation of physical and emotional experience extending over the life span. The menopausal problems of women always make them so tired. So, they need treatment and health education regarding menopausal care and prevention of problem. Objectives: to determine the severity of menopausal symptoms among menopausal women in experimental group and control group, to find the post-test of menopausal symptoms score among menopausal women in experimental group and control group, to evaluate the effectiveness of deep breathing exercise on menopausal symptoms among menopausal women in experimental group and to find the association of menopausal symptoms score among experimental group and control group with selected demographic variables. Methodology: The researcher used a Quasi experimental one group pre test post test design and Quantitative research approach for this study. A sample size of 40 menopausal women were selected by using convenient sampling technique (20 in experimental group and 20 in control group) in the village of Oachghat district Solan, Himachal Pradesh. The Pre test and post test menopausal symptoms were assessed by using standardized LAJ Heinemann Menopausal Rating Scale. Result: The results reveals that in experimental group, menopausal symptom pre-test & post-test mean difference score was 14.50 shows an effectiveness of Deep breathing exercises. There was a statistically Significant difference between pre and post test score for menopausal symptoms among menopausal women in experimental group at (p=0.001) level. There is significant association between the level of score and demographic variables age in years and type of family. The Chi-square value of demographic variable, age in years is 6.68 and type of family is 9.63 i. e., more than their calculated table value at 0.05 level of significance. Conclusion: Study concluded that, the deep breathing exercises had significant effect in reduction of menopausal symptoms among menopausal women.*

**Keywords:** Effectiveness, deep breathing exercises, menopausal symptoms, menopausal women, menopause

## 1. Introduction

Women experience various turning points in their life cycle, which may be developmental or transitional. Midlife is one such transitional period which brings about important changes in women. Menopause is a unique stage of female reproductive life cycle, a transition from reproductive to non-reproductive stage. <sup>(1)</sup> According to World Health Organization (WHO, 1996), the term 'natural menopause' is defined as the permanent cessation of menstruation resulting from the loss of ovarian follicular activity. Natural menopause is recognized to have occurred after 12 consecutive months of amenorrhoea for which there is no other obvious pathological and physiological cause. <sup>(2)</sup> Hot flashes and vaginal dryness are the two symptoms most frequently linked with menopause. Other symptoms associated with menopause include sleep disturbances, urinary complaints, sexual dysfunction, mood changes, and quality of life. <sup>(3)</sup> Deep breathing and relaxation techniques are more than just a nice-to-do. They're research-backed interventions for reducing symptoms of menopause. Breathing exercises help menopause symptoms on three different levels, biologically, emotionally and cognitively. <sup>(4)</sup>

## Objectives of the study:

1. To determine the severity of menopausal symptoms among menopausal women in experimental group and control group.
2. To find the post-test of menopausal symptoms score among menopausal women in experimental group and control group.
3. To evaluate the effectiveness of deep breathing exercise on menopausal symptoms among menopausal women in experimental group.
4. To find the association of menopausal symptoms score among experimental group and control group with selected demographic variables.

## Hypothesis:

**H1:** There is a significant difference in the menopausal symptoms scores of experimental group and the control group.

**H2:** There is a significant association of menopausal symptoms scores with their selected socio demographic variables in experimental and control group.

## 2. Methodology

Quasi experimental one group pre-test post-test design and Quantitative research approach for this study. A sample size of 40 menopausal women were selected by using convenient sampling technique (20 in experimental group and 20 in control group) in the village of Oachghat district Solan, Himachal Pradesh. The Pre-test and post-test menopausal symptoms were assessed by using standardized LAJ Heinemann Menopausal Rating Scale. The tool is an open access, which permits unrestricted use, distribution, and reproduction in any medium, provided the original work is properly cited. The Menopause Rating Scale (MRS) is a well-accepted instrument to measure the severity of menopausal symptoms. With split half method (odd-even) reliability ( $r$ ) = 0.79, which shows tool is highly reliable for the study.

## 3. Result

The results reveal that in experimental group, menopausal symptom pre-test & post-test mean difference score was 14.50, whereas in control group pre-test and post-test mean difference score was 0.20, shows an effectiveness of Deep breathing exercises. There is significant association between the level of score and demographic variables age in years and type of family. The Chi-square value of demographic variable, age in years is 6.68 and type of

family is 9.63 i.e., more than their calculated table value at 0.05 level of significance.

**Section 1:** This section deals with the description of the demographic variables of menopausal women and has been presented in the form of frequency and percentage.

The findings bring to light that, majority of subjects 50% in experimental group and 65% in control group were in age group of 46-50. In both experimental and control group 40% of menopausal women having no formal education. Most of the women in both experimental and control group were Hindu (100%) and (85%) respectively. 100% of women were from rural area. Maximum subjects 70% in experimental and 40% in control group were from nuclear family. Maximum subjects 75% in experimental and 70% in control were home maker. Majority 45% of subjects in experimental group and 40% in control group have family income above 20, 000. The subjects were having two children in experimental and control group (65%) and (75%) respectively. Majority of subjects in experimental group attained menopause at the age of 45-50 years and in control group 70% of subjects also attained menopause at the age of 45-50 years.

**Section 2:** This section deals with the description regarding determining the severity of menopausal symptoms among menopausal women in experimental group and control group.

**Table 1:** Mean, SD and mean percentage of pre test of menopausal symptoms of the experimental and control group  
N=20 (E=20 C=20)

	Descriptive Statistics	Mean Score	S. D.	Mean%
PRE TEST	Experimental group	25.6	3.53	58.18%
	Control group	28.15	6.21	63.98%

Maximum=44 Minimum=0

**Section 3:** This section deals with the findings of post-test of menopausal symptoms score among menopausal women in experimental and control group.

**Table 2:** Mean, SD and mean percentage of post test of menopausal symptoms of the experimental and control group  
N=20 (E=20 C=20)

	Descriptive Statistics	Mean Score	S. D.	Mean %
POST TEST	Experimental group	11.1	2.84	25.23
	Control group	27.95	6.13	63.52

Minimum=44 Maximum=0

**Section 4:** This section deals with the evaluation of the effectiveness of deep breathing exercise on menopausal symptoms among menopausal women in experimental group.

**Table 3:** Comparison within pre test and post test MRS score of experimental group with paired T Test  
N= 20+20

	Paired T test	Mean score	S. D.	Mean Difference	paired T test	P value	Table value at 0.05	Result
EXPERIMENTAL GROUP	Pre test MRS	25.6	3.53	14.5	21.49	<0.001	2.09	Significant
	Post test MRS	11.1	2.85					

Maximum = 44 Minimum=0

**No 4.7 Comparison within pre test and post test MRS score of control group with Paired T Test.**

N= 20+20

	Paired T test	Mean score	S. D.	Mean Difference	Paired T test	P value	Table value at 0.05	Result
CONTROL GROUP	Pte test MRS	28.15	6.22	0.2	1.71	0.1	2.09	Non-significant
	Post-test MRS	27.95	6.13					

**Maximum = 44 Minimum=0**

The results reveals that in experimental group, menopausal symptom pre-test & post-test mean difference score was 14.50 shows an effectiveness of Deep breathing exercises. There was a statistically Significant difference between pre and post test score for menopausal symptoms among menopausal women in experimental group at (p=0.001) level. Hence, research hypothesis H1 is accepted.

**Section-5** This section deals with the findings related to the association between pre and post test scores (experimental and control group) and selected demographic variables.

The chi-square test was used to determine the association between the score levels and selected demographic variables. There is significant association between the level of score and demographic variables age in years and type of family. The Chi-square value of demographic variable, age in years is 6.68 and type of family is 9.63 i. e., more than their calculated table value (Table value for age in year and for type of family is 5.99) at 0.05 level of significance. **Hence, research hypothesis H2 is accepted.**

**4. Conclusion**

There was significant difference in pre test and post test of experimental group unlike control group. Deep breathing exercises were found to be effective in improving the menopausal symptoms of menopausal women in the experimental group.

**5. Recommendations**

Based on the study findings, the following recommendations are stated: • A similar study can be conducted with a larger sample to generalize the findings.

- A descriptive study to compare the mood disorders for the menopausal women with the premenopausal women in selected community area.
- A study to assess the knowledge and attitude of menopausal mothers regarding the complementary and alternative therapies for menopausal problems during menopause.

**References**

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