



Effect of Hatha Yoga Therapy on Post Menopausal Symptoms among Menopausal Women Residing In Selected Urban Areas of Bhubaneswar

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ABSTRACT

Background:

Millions of women after menopause suffer from various post-menopausal symptoms which affects their livelihood drastically. A certain effective approach for reducing the post-menopausal symptoms and improving their life sustenance is through hatha yoga therapy.

Aim:

(1) Assess postmenopausal symptoms in menopausal women living in Bhubaneswar's selected urban areas. (2) To evaluate the impact of Hatha Yoga therapy on menopausal women experiencing postmenopausal symptoms. (3) To determine the relationship between menopausal women with postmenopausal symptoms and socio-demographic variables.

Method:

The current quantitative pre and post experimental study was carried out in Niladrivihar urban community area. The experimental and control groups each received 30 menopausal women. MRS and Self-Structured Demographic Performa are the instruments utilized for data collection.

Result:

The study findings illustrated that reduction of post-menopausal symptoms with $(t=9.98)(p=0.001)$ which is highly significant at the $p<0.05$, furthermore symptom reduction had no association with age, educational qualification, occupation, status of marriage, number of children, age of menopause, BMI, socioeconomic status, types of family, history of regular gynecological checkup.

Conclusion:

Nurses can use Hatha yoga therapy as an impactful intervention to reduce post-menopausal symptoms in menopausal women.

Key Words: Post-menopausal symptoms, Hatha Yoga therapy, Yoga, menopausal women, effect.

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INTRODUCTION

"There is no greater gift than the gift of Health. The nurses goal should be to achieve overall physical, mental, social and spiritual health."¹

Menopause is a natural factor of the ageing process. Understanding the impacts of

efforts to preserve excellent health at any age.²

It is estimated that 40-50 million women in the United States suffer from vasomotor symptoms (hot flushes and/or night sweats), which contribute for 85% of postmenopausal

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Women aged 50 and over will account for 26% of all women worldwide by 2021. This was up from 22% 10 years earlier. Women are also living longer lives. A woman turning 60 in 2019 can expect to live another 21 years on average.⁴

Menopause is characterised as a normal physiological process followed by a period of amenorrhoea of 12 months. The World Health Organization (WHO) defines menopause as "the permanent cessation of menstruation as a result of the decrease of ovarian function." Post-menopause is the period that follows the last menstrual period.⁵

Menopause is defined as the final cessation of ovarian follicular activity, as shown by a 12-month stoppage in menstrual flow, and occurs during the climacteric period. It might happen spontaneously at the age of 50, or it can be caused by premature ovarian impairment and even hysterectomy and ovariectomy.⁶

These menopausal changes in ageing are accompanied by a variety of physiological symptoms (cardiovascular, vasomotor control imbalance, urogenital atrophy, musculoskeletal/joint dysfunction, and osteoporosis). Menopause is not a high-risk time for psychiatric illness, although it might produce psychological problems (depression, cognitive abnormalities, and decreased sleep quality).⁷

Yoga is a practice that enhances people to improve their innate power in a healthy way. It provides strategies for achieving self-realization. Yoga literal translation from Sanskrit word "Yoke." Thus, yoga can be described as a technique of uniting the human spirit with the Universal spirit of God. According to Maharishi Patanjali, yoga as the control of mental changes.⁸

The Sanskrit name "Hatha" means "willful" or "forceful," alluding to the active way of yoga—or "sun" (ha) with "moon" (tha), relating to balancing yoga. Hatha yoga is an assemblage of intentional and active practices, aimed at achieving harmony and balance in the mind, body, and spirit.

METHODOLOGY

Design and context

The current research is a quantitative intervention study conducted in Bhubaneswar's

Niladrivihar Urban Slum. The study is quasi-experimental in nature, with a non-randomized control group. Convenience sampling procedures were used to choose the sample. The sample consisted of menopausal women who fulfilled the inclusion criteria and had postmenopausal symptoms. A four-week data collection period was used, which included a pretest, intervention period, and post-test 7 days after the intervention period ended. Menopausal women who will provide consent to participate in the study, whose periods have ceased for more than twelve months, who will score 11 on the MRS, and who can speak and comprehend Odia or English were necessary for admission. Menopausal women, those who are bedridden or mentally sick, have had a hysterectomy, are on hormone replacement treatment, or have visual or aural impairment are all excluded. Before beginning the investigation, the institutional ethics committee (KIIT/KIMS/IEC/886/2022) approved it. The total number of individuals was 60, with 30 chosen from Bhubaneswar's Niladrivihar Urban Slum for the intervention group and 30 chosen from Bhubaneswar's Sailashree Vihar for the control group. After obtaining their agreement, menopausal women were thoroughly informed about the operation, its benefits, and the efficacy of Hatha Yoga treatment. A self-structured demographic performance was created to assess socio-demographic variables including age, educational levels, occupational status, marital status, number of babies, age of menopause, body mass index, sociolect-economic class, family types, and history of regular Gynecological check-ups. The Menopause Rating Scale (MRS) was developed to assess menopausal women's postmenopausal symptom. The scales were translated into Odia. A single person was in charge of the scales.

Instruments

Section A: Self-structured demographic Performa:

The investigator constructed this tool to collect information or data regarding socio-demographic characteristics of the menopausal women with postmenopausal symptoms. It is a self-structured questionnaire comprising of 10 items intended to assess age,



educational, employment position, marriage status, number of kids, menopausal age, BMI, socioeconomic class, types of family and history of regular Gynecological check-up.

Section B: Menopause Rating Scale (MRS):

The Menopause Rating Scale (MRS) is a scale used to assess the post-menopausal symptoms for the menopausal women. It was published in 2004 by Klaas Heinemann et al. The scale comprising of 11 items of three domains as follows: Physical symptoms, psychological symptoms and Urogenital symptoms. In this study, symptoms which includes: Physical symptoms: (4 signs: sweating/hot flushes, heart discomfort, insomnia, joint and muscular pain), psychological symptoms: (4 symptoms: irritation, anxiousness, physical and mental tiredness) and Urogenital symptoms: (3 symptoms: sexual dysfunction, bladder dysfunction, vaginal dryness).⁹

STATISTICAL ANALYSIS

The SPSS 20.0 software was used for the statistical analysis. The standard deviation and

mean was utilised for continuous variable, whereas frequencies and percentages were employed for categorical data. The association between postmenopausal symptoms of menopausal women and their selected demographic variables was studied using paired and unpaired t-tests and chi square.

RESULTS

The analysis included 30 individuals from the intervention group and 30 from the control group who met the criteria for inclusion and exclusion. The demographic characteristics (refer to table-1) and postmenopausal symptoms were assessed using frequency and percentage distribution (refer to figure 1 and 2). The efficacy of Hatha Yoga treatment on postmenopausal symptoms was evaluated using a paired t-test (refer to tables 2 and 3), and the connection between postmenopausal symptoms and selected demographic characteristics was determined using Chi-Square.

Table-1
n=60

S. No	Demographic variables		Experimental Group		Control Group	
			Frequency	Percentage	Frequency	Percentage
1	Age (years)	45-50 years	4	13.3	6	20.0
		51-55 years	17	56.7	12	40.0
		56-60 years	6	20.0	7	23.3
		61-65 years	3	10.0	5	16.7
2	Educational status	Primary education	4	13.3	14	46.6
		Secondary education	13	43.4	6	20.0
		Graduates	4	13.3	5	16.7
		Others	9	30.0	5	16.7
3	Occupational status	Government employee	3	10.0	6	20.0
		Private employee	5	16.7	1	3.33
		Home maker	17	56.6	12	40.0
		Retired person	0	0.0	2	6.67
4	Marital status	Self-employed	5	16.7	9	30.0
		Married	12	40.0	11	36.7
		Unmarried	5	16.7	8	26.6
		Widow	8	26.6	5	16.7
5	Number Of Children	Divorced	5	16.7	6	20.0
		1	5	16.7	2	6.7
		2	12	40.0	10	33.3
		More than 2	13	43.3	18	60.0
6	Age of menopause	45-48 years	7	23.3	6	20.0
		49-52 years	5	16.7	14	46.7
		53-55 years	18	60.0	10	33.3
		<20	7	23.3	6	20.0
7	Body Mass Index (BMI)	21-25	4	13.4	5	16.7
		26-30	7	23.3	12	40.0
		>30	12	40.0	7	23.3
		upper class (5357 rupees and above)	7	23.3	5	16.7
8	Socioeconomic class : per ca-pita monthly income	upper-middle class (2652-5356 rupees)	4	13.3	10	33.3
		middle class (1570-2651 rupees)	7	23.3	12	40.0
		lower middle class (812-1569 rupees)	8	26.8	2	6.7
		lower class (<811 rupees)	4	13.3	1	3.3
9	Types of family	Nuclear	20	66.7	11	36.7
		joint	10	33.3	19	63.3
10	History of regular Gynecological check-up	No	18	60.0	20	66.7
		Yes	12	40.0	10	33.3
	If yes (how many time visit you gynecologist in a month)	once	4	13.3	8	26.7
		more than once	8	26.7	2	6.6



Table 1: represent the frequency and percentage distribution of socio-demographic variable of both intervention and control group.

Figure 1.

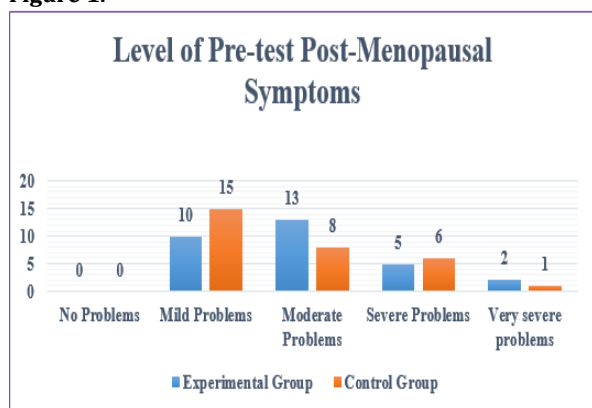


Figure 1 Represents the percentage distribution of participants according to the Pretest post menopausal symptoms in intervention and control group.

Figure 2.

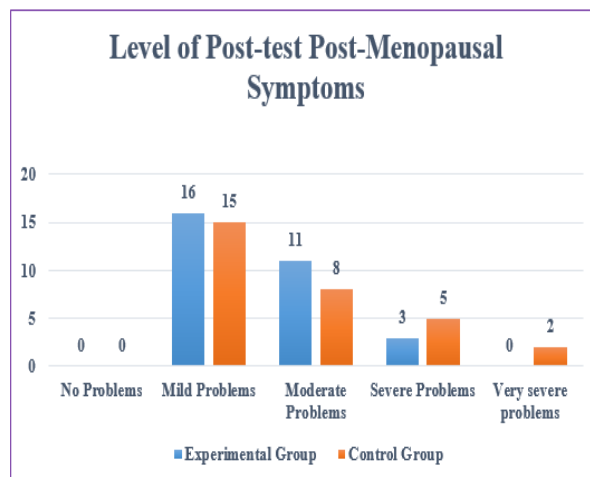


Figure 2 Represents the percentage distribution of participants according to the post-test post menopausal symptoms in intervention and control group.

Table-2.

(n = 30)

Test	Mean	Mean Difference	Standard Deviation	Paired 't' test value	P-value	Level of Significance
Pre-Test	19.33	8.27	9.73	9.98 (df) = 29	0.001	Significant
Post-Test	11.06		5.63			

Level of significance at p-value < 0.05

Table - 2 compares the Mean, Mean Difference, Standard Deviation and Paired 't' test value of participants between pretest and post-test in Intervention Group.

Table - 3

(n = 30)

Test	Mean	Mean Difference	Standard Deviation	Paired 't' test value	P-value	Level of Significance
Pre-Test	17.8	0.3	10.17	0.156 (df) = 29	0.438**	Not Significant
Post-Test	17.46		10.65			

Level of significance at p-value < 0.05

Table - 3: compare the Mean, Mean difference, Standard Deviation and Paired 't' test value of participants between pretest and post-test in Control Group.

DISCUSSION

In the present study, "effect of Hatha Yoga

therapy on post menopausal symptoms of menopausal women residing in selected urban areas of Bhubaneswar".

In the present study, the findings of Hatha Yoga therapy helped menopausal women in reducing their post menopausal symptoms generally.



The majority of the 17 (56.7%) menopausal women in the experimental group were between the ages of 51- 55 years. Similarly, 12 (40.0%) of the menopausal women in the control group were between the ages of 51-55 years. Regarding educational status, in experimental group 13 (43.4 %) menopausal women had secondary education. In the control group 14 (46.6 %) menopausal women had primary education. In experimental group, 17 (56.6 %) menopausal women were home maker. In control group, 12 (40.0 %) menopausal women were also home maker. 12 (40.0 %) menopausal women were married in experimental group and 11 (36.7 %) menopausal women were also married in control group. In experimental group, 8 (26.8 %) menopausal women were from lower middle class. In the control group, 12 (40.0%) menopausal women were from middle class. 13 (43.3 %) menopausal women had more than two children in experimental group and 18 (60.0 %) menopausal women also had more than two children in control group. In experimental group, majority 18 (60.0 %) menopausal women attained menopause in age between 53 – 55 years. In control group majority 14 (46.7 %) menopausal women attained menopause in age between 49 – 52 years. 12 (40.0 %) menopausal women were having BMI > than 30. Where as in control group 12 (40.0 %) menopausal women were having BMI: 26 – 30. 20 (66.7 %) menopausal women belongs to nuclear family in experimental group. In the control group, 19 (63.3 %) menopausal women belongs to the joint family. 18 (60.0 %) menopausal women didn't done the gynecological check-up previously in experimental group. 20 (66.7 %) menopausal women didn't done the gynecological check-up previously in control group also. 8 (26.7 %) menopausal women were visited for gynecological check-up more than once in experimental group and also in control group.

In this present study, effect of Hatha Yoga therapy on post menopausal symptoms was assessed. In experimental group Pre and post-intervention was done among 30 menopausal women 10(33.3%) were having Mild symptoms, 13(43.3%) were having Moderate symptoms, 5(16.8%) were having Severe

symptoms and 2 (6.6%) were having Very severe symptoms. After administration of Hatha Yoga therapy, 16(53.3%) were having mild symptoms, 11(36.6%) were having moderate symptoms and 3(10.0%) were having severe level of post menopausal symptoms. In control group, Pre and post-intervention was done among 30 menopausal women 15(50.0%) were having mild symptoms, 8(26.7%) were having moderate symptoms, 6(20.0%) were having severe symptoms and 5(16.7%) were having very severe symptoms of post menopausal symptoms. After 7days, the post-intervention maximum menopausal women 15(50.0%) were having mild symptoms, 8(26.7%) were having moderate symptoms, 5(16.7%) were having severe symptoms and 2 (6.6%) were having very severe level of post menopausal symptoms.

T. Jayadeepa et al. (2018) conducted another study in Tamilnadu, India, to assess the efficacy of Yoga therapy among menopausal women. In the experimental group, the majority 17(85%) of menopausal women had serious symptoms and 3(15%) of menopausal women also had very severe symptoms, however in the post-intervention period, 11(55%) of them experienced moderate symptoms and 9(45%) of them experienced light symptoms. Before intervention, 12 (60%) of menopausal women in the control group had really severe symptoms and 8 (40%) had severe symptoms, however 14 (70%) had very severe symptoms and 6 (30%) experienced severe symptoms after intervention.¹⁰

In the current study, overall post-intervention mean scores for Hatha Yoga were 11.06% in the intervention group and 17.46% in the control group, a difference of 6.4%. The experimental group's paired 't' test score for postmenopausal symptoms was 9.98 ('p' value=0.001), demonstrating the considerable benefit of yoga treatment. Hatha Yoga treatment had an unpaired 't' test score of 1.697.

Another study done by T. Jayadeepa et al. (2018) in Tamilnadu, India, investigated the effects of Yoga treatment on psychotic symptoms in menopausal woman. The study identified that the post-intervention mean



scores on yoga treatment was 82.5% in the intervention group and 36.25% in control group, a difference of 46.25%. The experimental group's paired 't' test score for psychiatric conditions was 6.726, indicating that yoga therapy was significantly helpful (P value=0.05). Yoga treatment had an unpaired 't' test score of 10.027.¹⁰

Age, educational status, employment position, married status, number of children, age of menopause, BMI, economic status, forms of family, and history of frequent gynaecological check-ups were non-significantly associated with post-test postmenopausal symptoms ratings in both groups.

LIMITATION

- Some menopausal women to were not cooperatively give their consent to be a part of the study.
- The intervention was provided inside the centre in the evening period, on 2nd week of June. The hot and arid climate might have affected the learning of Hatha Yoga, there by affecting the study findings.

DELIMITATION

- Menopausal women between 45-65 yrs.
- The study sample was confined to menopausal women from a single town, which reduced generalizability.
- Since the sample size was just 30, the findings could not be generalised.
- Randomization was not done. So the sample may not be true representation of the population.
- Menopausal women experiencing from menopausal symptoms.
- Data collection period was limited to 9months of the period.
- Since only urban postmenopausal women are included in this study, the results may not be generalized to rural women.
- Only selected yoga therapy has been taught. They would introduce limited tips to overcome from post menopausal symptoms. Those who are willing to accept for yoga therapy regularly with satisfactory manner without facing difficulties.

RECOMMENDATION

- A similar study could be conducted on a larger sample which would yield more reliable results.
- A comparable research with different samples can be undertaken in a different venue.
- A similar research might be undertaken to determine the relationship between numerous variables and postmenopausal symptoms.
- A comparative study can be conducted among postmenopausal symptoms, who practiced Hatha Yoga therapy before menopause and who practiced after menopause.

CONCLUSION

The main conclusion drawn from the present study was that, after giving Hatha Yoga therapy, it was found that there was significant level of improvement in post menopausal symptoms among menopausal women. Therefore, Hatha Yoga therapy is effective for reducing post menopausal symptoms.

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