

Effectiveness of Selected Yogasanas on Practice of Coping Strategies among Women with Premenopausal Symptoms Residing in Rural area of Pune

Dhanamma P Pujari¹, Seeta Devi², Ranjana Chavan²

¹M.Sc Nursing Student, ²Asst. Professor, Symbiosis College of Nursing (SCON) Symbiosis International (Deemed University) (SIU), Pune.411004

Abstract

Background Study: The premenopause is experienced by 1.5 million women each year and often involves symptoms and it divided in to three categories somatic and vasomotor , psychological , and urogenital sexual symptoms. In the rural area women are not aware about those symptoms and coping strategies to minimize the symptoms by practicing of Yogasanas.

Methodology: In the present study quantitative research approach used and one group pretest post-test Pre-experimental research design was executed. Total sample was 50; they were selected using non probability purposive sampling technique. The setting of the study was rural area of the Pune. The questionnaire and observational checklist was used in this study to collect the data. The independent variables were Premenopausal symptoms while the dependent variables were practice of selected Yogasanas on coping strategies. The group was taught about Yogasanas and explained them how to adopt coping strategies with premenopausal symptoms. The researchers have supervised and follow up was done for 20 days after intervention. In order to establish the reliability of the tool inter rated method was used. The scores were calculated and the reliability was established by Cohen's Kappa 0.86.

Result: In this study paired t-test was used to check the significance between pretest and post test results, and statistical significant result was p-value is less than 0.05, it suggests that women with premenopausal symptoms are minimized after the practice of Yoga asana on coping strategies.

Conclusion: It is concluded that practice of selected Yogasanas on coping strategies are effective and helps to minimize the premenopausal symptoms.

Keywords: Effectiveness, Practice, Yogasanas, Coping strategies, Premenopausal symptoms.

Introduction and Background

Women health is differ from men due to unique conditions that are biological, social and behavioral aspects, according to WHO health is defined as “a state of

complete physical, mental and social well -being and not merely absence of disease or infirmity” . Women health is an example of group of people living in geographical area. By this women's health has been explained about issues of women health related to their reproductive health (maternal and child), genital health and breast health, endocrine health including menstruation, birth control and menopause. ¹

During the life cycle of women, they go through many reproductive stages, there will be a lot many changes observed in women's life, these changes effect physical and mental health of the women. The

Corresponding author-

Dr Seeta Devi

Asst. Professor, Symbiosis College of Nursing (SCON)
Symbiosis International (Deemed University) (SIU),
Senapati Bapat road, Pune.411004
sitadevi@scon.edu.in, Phone no: 9665539533

stages of reproductive life of women are Puberty or menarche; it usually starts from 13-15 year due to fluctuated hormonal influence. In this stage, girl starts menstrual cycle. Second stage of women's life is sexual maturation. In this stage women are able to conceive and produce a new life that is pregnancy. Third stage of reproductive life of a woman is menopausal stage, in this cessation of menstruation starts, women faces the sub categories that are perimenopause, premenopause and post menopause due to hormonal changes, these changes have a huge impact on women's physical and mental health. Menopause is defined as a permanent cessation of menstruation at the end of reproductive life due to ovarian follicular inactivity. Before starting the menopause women go through the stages of menopause which is premenopause, perimenopause and post-menopause. Premenopause refers to the period before getting menopause, post menopause refers to period after entering into menopause and perimenopause refers to period around the menopause that is 40-55 years. In premenopausal stage, estrogen and progesterone levels in blood will be decreased. The menopausal symptoms divided in to three phases vasomotor and somatic symptoms include hot flush, discomfort, sleeping problem, joint and muscular discomfort. Second sub aspect of symptoms is psychological symptoms are depressive mood, irritability, anxiety, physical and mental exhaustion. Last one is urogenital sexual symptoms such as sexual problem, bladder problem, dryness of vagina.²

In India the premenopause is experienced by 1.5 million women each year and often involves severe symptoms which including vasomotor, vaginal dryness, sleeping disturbance, lethargy³

Many studies have stated that, coping strategies help the women to cope up with menopausal symptoms and some of the coping strategies such as practicing yoga minimize the symptoms of premenopause. There are some of the self-coping strategies useful to control the symptoms, in case of hot flushes, sweating, we can advise the woman to sit in a cooler environment, take shower, cold drink, wear sweat absorbing, non-nylon under wear, avoid over sleeping, not having tea or coffee in the evening, have milk yogurt, crying to get relax, etc.⁴

Yoga is Vedic, original and ancient holistic art of living which includes Physical, mental, moral and spiritual spheres. Yogasanas has a great effect in keeping the body and mind peace, which helps to bring an energy and balance the hormonal levels which are fluctuating rapidly in premenopausal period. Yoga calms the nervous system, minimizes stress and aggregation of hot flush. Yoga therapy is weight bearing exercise, strengthening our bones and preventing osteoporosis. Pranayam helps to reduce the hot flush because it minimize the body temperature naturally.⁵

Hormonal levels and which are natural consequences of aging so it is essential to know the coping strategies, alternative therapies and Yoga asana practice with or without medical treatment.^{6,7}

Prevalence of women with menopausal symptoms among midlife women with aging of the world wide population in the coming decades, estimated 1.2 billion women by 2030.^{8,9}

Based on the review of literature, researcher has decided to execute a research to assess the effectiveness of selected Yogasanas on practice of coping strategies among women with premenopausal symptom residing in rural area of Pune.

Objective of the study

1. To assess the premenopausal symptoms among women.
2. To assess the practice of selected Yogasanas and coping strategies among women with premenopausal symptoms after intervention.
3. To associate the ipractice and coping strategies with the demographic variables

Hypothesis

H0-There is no significant effect between pretest and post practice of Yogasanas and coping strategies on women with premenopausal symptoms

Methodology

Research Approach and research Design

The researchers have used Quantitative research approach and I pre- experimental pretest and posttest

research design was executed in the present study.

Setting: The study was conducted in rural area of Pune district.

Sampling techniques: A non probability purposive sampling technique was used.

Sample size: 50 women with premenopausal symptoms, who are willing to participate in this study. These participants have informed about the study and its purpose.

Tools of data collection: In the present study 5 sections were used to collect data

Section I: Demographic data:

The first part of the tool consists of 9 items for obtaining information about the selected background factors such as age in years, marital status, education qualification, employment status, socio economic status, family income per month, family support, religion, and type of family, the researcher collected the information using interview method.

Section II: Assess the level of premenopausal symptoms before and after intervention

12 symptoms were assessed by rating scale. The scores were based on the severity of symptoms, such as mild 1-4, moderate 5-8, and severe 9-12

Section III: Coping strategies

Coping strategies includes self-coping and

alternative strategies adopted by the women as per the symptoms. Self-coping strategies are sitting in cooler environment, taking two time shower, sharing problem with loved ones etc which is listed to assess. And alternative strategies are Yoga, exercise, mediation, consuming more vitamin content fruits, use of garlic in food etc

The coping strategies assessed by structured questionnaire. They responded for questions

Section IV: Practice of Yogasanas

Asanas are Anulom- vilom Pranayam, Vajrasanas, Badhakonasana (butterfly), Padmasana, Shavasanas, and Dhyana. Women had practiced of these Asanas every day for 20 days at least 30 min.

The investigator observed the practice on daily bases for 20 days, once a day

Section V: Consists of observational checklist to measure practice of Yogasanas on coping strategies .The practice of Yogasanas was observed by follow up.

Women were selected, who were having premenopausal symptoms and willing to adopt coping strategies and practice of Yogasanas. The group was taught about selected Yogasanas and adopted coping strategies. In order to establish the reliability of the tool inter rated method was used. The score were calculated and the reliability was established by Cohen’s Kappa 0.86. i

Results

Table 1: Premenopausal symptom before and after intervention among women in premenopausal period

N=50

Premenopausal symptoms	Pretest		Posttest	
	Frequency	Percentage %	Frequency	Percentage %
Mild (Score 0-4)	16	32.0%	50	100.0%
Moderate (Score 5-8)	34	68.0%	0	0.0%
Severe (Score 9-12)	0	0.0%	0	0.0%

Table 2: Paired t-test for the effect of Yogasanas on Premenopausal symptom

n=50

	Mean	SD	t	Df	p-value
Pretest	5.34	1.24	25.3	49	0.000
Posttest	0.68	0.87			

Table 3: Self-coping strategies before and after intervention

n=50

Self-coping	Pretest		Posttest	
	Freq	%	Freq	%
Good (score 25-36)	0	0%	50	100%
Average (score 13-24)	6	12%	0	0%
Poor (score 0-12)	44	88%	0	0%

Table 4: Alternative coping strategies before and after intervention

N=50

Alternative coping	Pretest		Posttest	
	Frequency	Percentage %	Frequency	Percentage %
Good (score 17-25)	0	0%	50	100%
Average (score 9-16)	3	6%	0	0%
Poor (score 0-8)	47	94%	0	0%

Table 5: Yogasanas Practice before and after intervention

n=50

Practice	Pretest		Posttest	
	Frequency	Percentage %	Frequency	Percentage %
Inadequate (Score 0-19)	49	98%	0	0%
Adequate (Score >19)	1	2%	50	100%

Table 6: Fisher’s exact test for association of the premenopausal symptoms among women with the demographic variables

n=50

Demographic variable		Premenopausal symptoms		p-value
		Mild	Moderate	
Age in year	30-35	12	12	0.024
	36-40	3	10	
	41-45	1	12	
Educational qualification	High school certificate	4	11	0.171
	Middle school certificate	3	8	
	Primary school certificate	7	5	
	Illiterate	2	10	
Employment status	Semiskilled worker	5	15	0.538
	Unemployed	11	19	
Socio economic status	Lower middle class	16	25	0.043
	Upper lower class	0	9	
Family income month	Rs. 13495-17999	5	9	0.746
	Rs. 8989-13494	11	25	
Physical and psychological support	Yes	1	3	1.000
	No	15	31	
Religion	Hindu	16	31	0.542
	Muslim	0	3	
Type of family	Joint family	6	3	0.021
	Nuclear family	10	31	

Discussion

In this study pre experimental one group pretest posttest design was adopted to determine the effectiveness of selected Yogasanas on coping strategies among women with premenopausal symptoms.

The mean posttest 0.68 was lesser than the mean pretest score 5.34, computed t-test statistic value is 25.3 with 49 degree of freedom. Corresponding p-value was 0.000 (less than 0.05). It shows that the selected Yogasanas on coping strategies was effective to minimize the premenopausal symptoms. We reject the null hypothesis stating that there will be a significant effect of selected Yogasanas on coping strategies to minimize the premenopausal symptoms.

In the present study, majority 34(68%) of the women had moderate premenopausal symptoms (score 5-8), and 16 (32%) of them had mild premenopausal symptoms (Score 0-4).

In pretest severity of women with premenopausal symptoms had 34(68%) of moderate symptoms, and 16(32%) women had mild symptoms but in posttest showed minimized premenopause symptoms after practicing Yogasanas and coping strategies.

In this study Self coping strategies adopted by women with premenopausal symptoms that in pre-test, 44 (88%) of the women had poor self-coping (score 0-12) and 12% of them had average coping (score 13-24). In post-test, all the women had good self-coping (score 25-36). It indicates that the self-coping strategies of women improved remarkably after the selected yoga asana.

Alternative coping strategies shows that in pre-test, 47 (94%) of the women had poor alternative-coping strategies (score 0-8) and 3 (6%) of them had average alternative coping strategies (score 9-16). But In post-test, all the women had adopted alternative-coping strategies (score 25-36). And they have adopted alternative coping strategies in good manner that indicate that the alternative-coping of women has been improved remarkably after the selected yoga asana.

In current study practice of selected Yogasanas by women in pre-test, none of the women were doing Yogaasana Vajrasanas and Badhakonasana. Only 1 (2%)

of them were practicing yoga asana that are anulom-vilom Pranayam, Padmasana, Shavasanas and Dhyana. In post-test, 43 (86%) of them were doing all the yoga asana once a day every day and 7 (14%) of them were doing all the yoga asana once a week.

The above findings of the study are similar to this study. A cross sectional study was conducted to assess menopausal symptoms and coping strategies adopted are exercise, yoga, and relaxation breathing technique, ifocus on diet. The result shown that there is an association between menopausal symptoms and nature of exercise. These findings can be used to plan minimize the premenopausal symptoms by adopting coping strategies.¹²

Another study reveals that prevalence, severity and quality of premenopausal symptoms was assessed and results shown that mental exhaustion (49.5%), joint and muscular discomfort (48.5%) and irritability (41.3%) frequently noticed. And quality evaluated by socioeconomic status, physical activity and body mass index.¹³

A study was done on prevalence and predictor of depressive symptoms assessed in older premenopausal symptoms, they have used CES-D (Center for Epidemiologic Studies Depression Scale) and score was 16. They have discussed those women who have 1-2 children or more that this they don't suffer from depression but women who is widow or nulliparity is more likely risk having depression. In present study researchers have used structured questionnaire method to assess depressive mood and they have shared problem with their loved ones.¹⁴

A study conducted on effect of Yoga therapy and periodical physical activities on control of FBS, Glycated hemoglobin and TSH level in women with premenopause. They have divided the sample in two groups, one is experimental (Hatha yoga) used to relieve stress and enhance health and other is control group (physical exercise). Practice of yoga therapy was given for 45 minutes, daily for 12 weeks. The result shown that the practice of Yoga therapy was significantly ineffective in controlling FBS to calm and relieve the stress.¹⁵

A cross sectional study conducted to assess the incidence of intensity of menopausal features and their

impact on value of living style among middle aged women. Study conducted over 8373 women aged 40-50 years. The menopausal rating scale was executed to find the menopausal features such as personal characteristics, joints discomfort and psychological symptoms . 77 % women noted with premenopausal symptoms .¹⁶

A retrospective study was conducted to assess the climacteric complaints in association with development of menopausal problems. In their study they have found an association between sociodemographic data and premenopausal symptoms. They have checked about the regularity of menstrual cycle, use of HRT and socio demographic data. Results revealed that tiredness, irritability and unhappiness were powerfully related with socioeconomic characteristics. Life events were only occasionally associated with prevalence of the studied complaints. In current study have shown that socioeconomic status is associate with premenopausal symptoms.¹⁷

Conflict of Interest – Nil

Source of Funding- self

Ethical Clearance – Ethical clearance was obtained from ethical committee of Symbiosis College of nursing.

References

1. Wikipedia contributors. (2020, June 3). Women's health. In Wikipedia, The Free Encyclopedia. Retrieved 08:59, June 11, 2020, https://en.wikipedia.org/w/index.php?title=Women%27s_health&oldid=960581220
2. Dutta DC. Textbook of Gyneacology. New central book agency; 2003.
3. Sussman M, Trocio J, Best C, Mirkin S, Bushmakin AG, Yood R, Friedman M, Menzin J, Louie M. Prevalence of menopausal symptoms among mid-life women: findings from electronic medical records. *BMC women's health*. 2015 Dec;15(1):58.
4. Ozpinar s, Cevik k. Women's menopause-related complaints and coping strategies: Manisa sample. *International Journal of Nursing*. 2016 Dec;3(2):69-78.
5. Vaze N, Joshi S. Yoga and menopausal transition. *Journal of mid-life health*. 2010 Jul;1(2):56.
6. Harvard health publishing (2017); Dealing with the symptoms of menopause. <https://www.health.harvard.edu/womens-health/dealing-with-the-symptoms-of-menopause>
7. Unni J. Third consensus meeting of Indian Menopause Society (2008): A summary. *Journal of Mid-life health*. 2010 Jan;1(1):43.
8. Nateri NS, Beigi M, Kazemi A, Shirinkam F. Women coping strategies towards menopause and its relationship with sexual dysfunction. *Iranian journal of nursing and midwifery research*. 2017 Sep;22(5):343.
9. Caceres BA. King's Theory of Goal Attainment: exploring functional status. *Nursing science quarterly*. 2015 Apr; 28(2):151-5.
10. Polit, D. F., & Hungler, B. P. (1991). *Nursing research: Principles and methods*, Philadelphia: Lippincott.
11. Polit, D.F. and Beck, C.T. (2008). *Nursing Research: Generating and Assessing Evidence for Nursing Practice*. 8th Edition, Wolters Kluwer Health/ Lippincott Williams & Wilkins, Philadelphia, 796 s.
12. Agarwal AK, Kiron N, Gupta R, Sengar A, Gupta P. A study of assessment menopausal symptoms and coping strategies among middle age women of North Central India. *International Journal of Community Medicine and Public Health*. 2018 Oct;5(10):4470.
13. Diamond DM, Campbell AM, Park CR, Halonen J, Zoladz PR. The temporal dynamics model of emotional memory processing: a synthesis on the neurobiological basis of stress-induced amnesia, flashbulb and traumatic memories, and the Yerkes-Dodson law. *Neural plasticity*; 2007.
14. Harlow BL, Cohen LS, Otto MW, Spiegelman D, Cramer DW. Prevalence and predictors of depressive symptoms in older premenopausal women: the Harvard Study of Moods and Cycles. *Archives of General Psychiatry*. 1999 May 1; 56(5):418-24.
15. Chaturvedi A, Nayak G, Nayak AG, Rao A. Comparative assessment of the effects of hatha yoga and physical exercise on biochemical functions in perimenopausal women. *Journal of clinical and diagnostic research: JCDR*. 2016 August; 10(8):KC01.
16. Blumel JE, Chedraui P, Baron G, Belzares E, Bencosme A, Calle A, Danckers L, Espinoza MT, Flores D, Gomez G, Hernandez-Bueno JA. A

large multinational study of vasomotor symptom prevalence, duration, and impact on quality of life in middle-aged women. *Menopause*. 2011 July 1;18 (7):778-85.

17. Davidsen M. Climacteric complaints and their relation to menopausal development—a retrospective analysis. *Maturitas*. 1993 Nov 1;17 (3):155-66