

**“EFFECT OF SURYANAMASKAR ON STRESS IN POSTMENOPAUSAL WOMEN”****Physiotherapy****Fenali Soni**

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ABSTRACT

Background: Menopause is the turning point in women's life cycle. Menopause is defined as a woman having cessation of vaginal bleeding over 12 months. Menopause is a normal stage in the life process of a woman but many women find the time around menopause stressful. Moreover, modern-day lifestyle increases stress due to changes at physical, mental, and emotional level. Suryanamaskar is a yogic practice that helps reduction of stress in students, Adolescent school children, employees, postpartum women, etc. **Purpose Of Study:** The purpose of the study to effect suryanamaskar on stress in postmenopausal woman. **Methodology:** After taking written consent from the menopausal women, procedure was explained and selected according to the inclusion criteria. An experimental study with pre and post-design was conducted on 35 postmenopausal women in the age range of 45–55 years for 14 days, with an intervention of suryanamaskar every day. Stress was recorded before and after the suryanamaskar by Perceived Stress Scale. **Result:** The mean score of pretest for postmenopausal women stress is 18.20 ± 3.05 and posttest is 11.60 ± 2.2 . The mean difference (6.60 ± 2.26) was statistically significant with 't' score -17.24 and p value 0.00. Furthermore, the mean score shows that there is reduction of stress from pre testing to post testing. It clearly indicates that there is significant effect of suryanamaskar in reducing stress of postmenopausal women. **Conclusion:** Suryanamaskar is beneficial for reducing stress in postmenopausal women.

KEYWORDS

Suryanamaskar, Perceived Stress Scale, Postmenopausal women

INTRODUCTION:

Menopause is an irreversible cessation of ovarian functions.^[1] It is a physiological process that marks the end of reproductive phase in lives of women.^[2] It commences with a major shift in hormonal balance, characterized by a decrease in estrogen levels and an increase in FSH and LH hormones. This hormonal shift eventually causes a drop in progesterone levels. These experiences can differ depending on a person's specific psychological, social and cultural characteristics. Hot flashes are periods of flushing and rapid sweating that are accompanied by feelings of coolness, heart palpitations, anxiety, pressure in the head and chest, nausea, coughing and difficulty concentrating.^[3]

Menopause causes a variety of symptoms, including hot flushes, night sweats, urinary and vaginal changes, dyspareunia and sleeplessness. Worldwide, natural menopause occurs between the ages of 45 and 55 years.^[2]

Stress can be defined as one's mental, emotional, and physiological responses to life's challenges. However, an individual's experience and understanding of stress is determined by their preconceived notions, existing coping mechanisms and previous interactions with the environment, rather than the stress-causing events themselves. When unmanaged, stress increases the risk of depression and anxiety.^[4]

The Surya-Namaskar, an ancient yogic practice contains 12 stages in which yoga asanas are performed in a certain order following a precise breathing order, is one of the most prominent yogic practices. These yoga practices use deep relaxation to eliminate all forms of tension, perceived stress and physiological indications of the stressor.^[4]

Saraswati (1983) defines it as a set of twelve physical postures. Suryanamaskar comprises asanas such as Pranamasan, Hasta Utthanasan, Padahastasan, Ashwasanchalanasan, Ashtanaga Namasakar, Bhujangasan, and Parvatasan.^[5]

Stress was recorded before and after the suryanamaskar by Perceived Stress Scale.

The Perceived Stress Scale (PSS)

The Perceived Stress Scale (PSS) is a globally recognized psychological tool designed to assess how individuals perceive stress in their lives. The PSS measures the degree to which situations in a person's life are appraised as unpredictable, uncontrollable and overwhelming. It is based on the idea that perception, rather than the objective nature of events, plays a crucial role in the stress response. The most common version, the PSS-10, contains 10 items rated on a 5-point Likert scale (ranging from 0 = "Never" to 4 = "Very Often"), with higher scores indicating higher levels of perceived stress.^[6]

Need Of The Study

Postmenopausal women often experience heightened stress and anxiety due to hormonal changes, including decreased estrogen and progesterone levels. While yoga has shown promise in stress reduction, no study has yet focused specifically exploring the effects of Surya Namaskar on stress in postmenopausal women.

This study aims to address this gap and provide evidence on the potential benefits of Surya Namaskar as a holistic, non-invasive approach to managing stress and improving the overall well-being of postmenopausal women.

Aims And Objectives

Aim: The aim of this study is to find effect of suryanamaskar on stress in postmenopausal women.

Objectives: To find the effect of suryanamaskar on stress by Perceived stress scale (PSS) in postmenopausal women.

Hypothesis

H0- There will be no statistically significant effect of suryanamaskar on stress in postmenopausal women.

H1- There will be statistically significant effect of suryanamaskar on stress in postmenopausal women.

MATERIAL AND METHODOLOGY

Study Setting: Postmenopausal women

Study Duration: 1 month.

Study Design: Quasi-experimental.

Sampling Design: Convenient sampling.

Sample Size: 35 Postmenopausal women.

Inclusion Criteria

- Women with the age group of 45 to 55 years.
- Women who are willing to give their consent for collection of information.

Exclusion Criteria

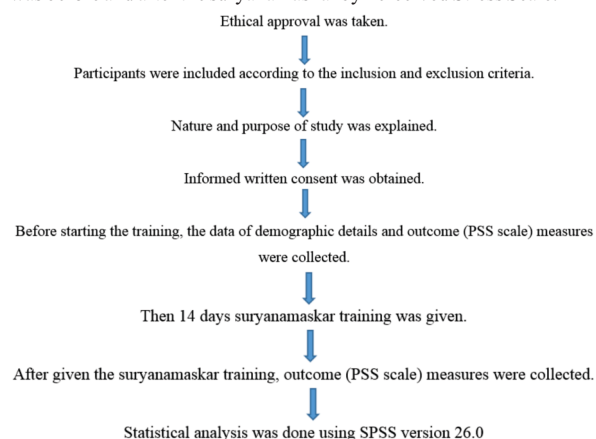
- Any other severe musculoskeletal, neurological disorders.
- Any Gynecological history of surgery (hysterectomy etc.)

Procedure

After taking written consent from menopausal women, procedure was explained and selected according to the inclusion criteria.

An experimental study with pre and post-design was conducted on 35 postmenopausal women in the age range of 45–55 years for 14 days, with an intervention of suryanamaskar every day. Stress was recorded

was before and after the suryanamaskar by Perceived Stress Scale.

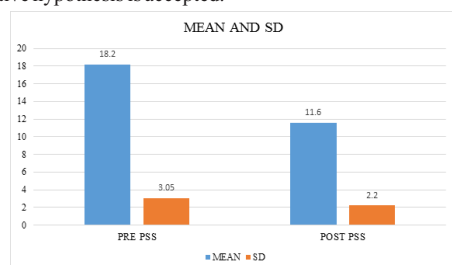


RESULT

The mean score of pretest for postmenopausal women stress is 18.20 ± 3.05 and posttest is 11.60 ± 2.2 .

The mean difference (6.60 ± 2.2) was statistically significant with t value -17.24 and p value 0.00.

Hence, the mean score indicates reduction in stress occurs after Suryanamaskar for 2 week in post-menopausal women. Thus, the alternative hypothesis is accepted.



Graph – 1: Mean and SD of PREPSS and POSTPSS

Table – 1: Mean, SD, T value and p score of Age, BMI AND PSS pre-post

	MEAN $\pm$ SD	T value	P SCORE
Age	46.26 $\pm$ 3.32	-17.24	0.00
BMI	23.96 $\pm$ 5.55		
PSS Pre	18.20 $\pm$ 3.05		
PSS Post	11.60 $\pm$ 2.2		

DISCUSSION

The study aimed to investigate the effect of Surya Namaskar on stress levels in postmenopausal women. The findings demonstrate that regular practice of Surya Namaskar significantly reduces stress by fostering relaxation, emotional balance and mental focus. This can be attributed to its ability to activate the parasympathetic nervous system, which plays a key role in the body's rest-and-digest response. Activation of the parasympathetic nervous system reduces cortisol levels a primary stress hormone and helps the body manage stress more effectively.

Surya Namaskar's rhythmic breathing patterns are an integral component of its stress-relieving potential. Controlled and synchronized breathing enhances oxygenation, regulates the autonomic nervous system and reduces physiological arousal associated with stress. This aligns with existing research that highlights the effectiveness of mindfulness-based practices, such as yoga and pranayama, in reducing stress and improving mental well-being.

For postmenopausal women, who are particularly vulnerable to heightened stress and anxiety due to hormonal fluctuations, Surya Namaskar serves as a holistic approach to addressing physical, emotional and psychological challenges. Its multifaceted benefits not only improve stress management but also contribute to overall well-being by enhancing emotional resilience and mental clarity.

Gevanshi Gala et al.(2022) find Suryanamaskar on Stress in Delayed-Postpartum Indian Women. Result indicated that regular practice of the Suryanamaskar, even if has been practiced for a short duration, helps to reduce stress levels.^[4] So this study helps to address physical, emotional, and psychological well-being to reduce stress in post-menopausal women.

CONCLUSIONS

Suryanamaskar offers a potential benefits for reducing stress and improve well-being in postmenopausal women, supporting healthier aging.

Limitation

- Small sample size
- Study duration is very less

Future Recommendations

- Include larger sample sizes
- Long-term effects of integrating chanting with Suryanamaskar should be explored
- Effect of Suryanamaskar with chanting in other population

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