

A Descriptive Study to Assess the Knowledge of Post-Menopausal Women Regarding the Effects of Pranayama on Post-Menopausal Symptoms

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Abstract

Menopausal women suffer from many problems such as hot flushes, headache, profuse night sweating, fatigue, hair loss, insomnia, weight gain, joint pain, muscle pain, dry skin, vaginal dryness and mood disorders and it is well understood that menopausal women have been suffering from hot flushes, insomnia, headache, fatigue and profuse night sweating there is a need to overcome this unsatisfied life event. Thus, the investigator conducted a study to assess the knowledge regarding effects of pranayama on post-menopausal symptoms among post-menopausal women. The study was conducted in AVJ Heights, Zeta-1, Greater Noida, Uttar Pradesh. 100 Menopausal women were selected by convenience sampling technique. A structured knowledge questionnaire was used for assessing the knowledge regarding effects of pranayama on selected post-menopausal symptoms for post-menopausal women. Descriptive statistics were used to analyse the data. In this study, the mean score was 67.92 with S.D 8.79. Mode and median of were 66 and 66. Hence, the participants had average knowledge regarding effects of pranayama on post-menopausal symptoms.

Keywords: Pranayama, Post-menopausal symptoms, post-menopausal women.

Introduction

Menopause is a natural stage of a woman's life.

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Menopause is a stage in a woman's life when her reproductive system slows down and eventually quits, usually between the ages of 40 and 60, and is marked by hormonal, physical, and psychological changes. Menopause can also occur if the ovaries are eliminated or if the reproductive activity of the ovaries is halted. It happens when the ovaries stop generating oestrogen, which causes the reproductive system to shut down gradually or abruptly. ¹

Menopausal symptoms affect 80% of ladies who are approaching menopause suffering with uneasiness. Some women easily adopt the changes with no difficulty. Typical menopausal symptoms, such as hot flushes or night sweats, are caused by change in hormonal levels in the female reproductive system. Other symptoms include irregular menstruation, changes in sexual desire, hot flashes, profuse night sweats, insomnia, fatigue, headache, vaginal dryness and urinary problems, changes in appearances, mood swings, sleep disturbances, palpitations, backache, memory loss, and depression.² For coping with climacteric symptoms, non-hormonal methods are more widely accepted by women than hormonal therapy.³

Yoga comprises physical postures as well as advice for ethical lifestyle and spiritual practice with the ultimate goal of uniting mind, body, and spirit. Yoga is often associated with physical postures (asana), breathing techniques (pranayama), and meditation (dyana). Yoga have been shown to decrease anxiety, distress, blood pressure, pain and fatigue.^{4,5,6,7,8}

A randomized controlled trial with three by two factorial design was conducted by Newton K.M to study the efficacy of yoga on vasomotor symptoms (VMS). Eligible women were randomized to yoga (n=107), exercise (n=106), or usual activity (n=142), and were simultaneously randomized to double-blind comparison of omega-3 fatty acid (n=177) or placebo (n=178) capsules. Yoga intervention was twelve, weekly, 90-minute yoga classes with daily home practice. Primary outcomes were VMS frequency and bother assessed by daily diaries at baseline, 6, and 12 weeks. Secondary outcomes included insomnia symptoms (Insomnia Severity Index) at baseline and 12 weeks. Among 249 randomized women,

237 (95%) completed 12-week assessments. Mean baseline VMS frequency was 7.4/day (95% CI 6.6, 8.1) in the yoga group and 8.0/day (95% CI 7.3, 8.7) in the usual activity group. There was no difference between intervention groups in change in VMS frequency from baseline to 6 and 12 weeks (mean difference (yoga – usual activity) from baseline –0.3 (95% CI –1.1, 0.5) at 6 weeks and –0.3 (95% CI –1.2, 0.6) at 12 weeks (p=0.119 across both time points). Results were similar for VMS bother. At week 12, yoga was associated with an improvement in insomnia symptoms (mean difference [yoga-usual activity] in change –Insomnia Severity Index, 1.3 [95% CI –2.5, –0.1] [p=0.007]).⁹

Vora. R and Dangi. A studied the effect of Yoga on menopausal symptoms in females in the post-menopausal phase. Total Menopause Rating Scale (MRS) score with three subscale scores (somatic-vegetative, psychological and urogenital) of MRS and Menopause Specific Quality of Life Questionnaire (MENQOL) score was measured on day 1 and day 30 in the study group which performed Yoga (Pranayama, Surya Namaskar and Savasana) under supervision for 4 weeks on every alternate day. The scores were compared with the control group that did not perform Yoga. Results showed that on day 1 the scores in both the groups were comparable. On day 30, the Yoga group showed a statistically significant reduction in the total MRS score, scores on all the 3 subscales of MRS as well as MENQOL score.¹⁰

Objectives

To assess the knowledge regarding effects of pranayama on post-menopausal

symptoms among post-menopausal women.

Materials and Methods

For the current study, research approach used was the quantitative approach and the research design is the descriptive design. The study was conducted in urban area of AVJ Heights, Zeta, Greater Noida, Uttar Pradesh. The area was selected on the basis of: (1) Geographical proximity (2) Availability of subjects (3) Feasibility in conducting the study (4) Familiarity of the place. Non- Probability convenience sampling technique was used. Population comprised of 100 post-menopausal women, aged between 40-60 years. A structured questionnaire was prepared to assess the knowledge of women regarding the effects of Pranayama on Postmenopausal symptoms. A questionnaire comprised of two sections- Section A and Section B. Section A consists of 9 items to collect information on sample characteristics and Section B consists of 20 knowledge items. The maximum score on the knowledge item was 100 with score 5 for each correct answer. Data was collected in the month of August and for the collection of data, a formal administrative approval was taken from the secretary of AVJ Heights Society, Greater Noida, U.P. The tool in the form of questionnaire was administered to post-menopausal women who were oriented and explained about the purpose of the study. Post-menopausal women willing to participate in the study and living in

the society, were the part of the study. They were also assured about the confidentiality of their responses. Average time taken for completion of tools by the participants was 25 minutes. Data was analysed using descriptive statistics.

Result and Discussion

Findings related to Demographic Characteristics of Sample Subjects

Findings related to Demographic Characteristics of sample subjects reveals that majority of the sample subjects were in the age group of 40-45 years that is 60 (60%). Majority of the samples' age at menarche was 12 years, i.e. (37%). 70% of sample subjects were above 40 years at the time of menopause. 63% of sample subjects got married after 25 years of age. Only 17% of sample subjects had no children whereas, 46% of the sample subjects had 2 children. Majority of the sample subjects were educated above secondary level. 61% of sample subjects were employed and only 4% were retired. Majority (63%) of the sample subjects' family income was above 15000/- Rs. Social media was the major source of information for 43% of sample subjects.

Findings related to knowledge score of the sample subjects

Table 1: Mean, Median and Mode of Knowledge scores

n=100

Total Score	Mean	Median	Mode	Standard Deviation
6792	67.92	66	66	8.79

Data in table-1 shows the overall mean of the knowledge score was 67.92. It further reveals that median, mode of sample subjects' knowledge score was 66 and 66 respectively. Standard deviation of sample was 8.79 which shows that the group is heterogenous group.

Table 2: Frequency and percentage distribution of sample subjects according to their level of knowledge regarding effects of pranayama on post-menopausal symptoms.**n=100**

Knowledge Score	Frequency	Percentage
Poor Knowledge	0	0
Average Knowledge	58	58%
Good Knowledge	42	42%

Data in table- 2 shows that; Most of the sample subjects were having average knowledge that is 58 (58%), 42 (42%) of the sample subjects were having average knowledge and no sample subject comes under poor knowledge.

Conclusion

Hence, we conclude that most of the sample subjects have average knowledge i.e. 58% and 0 samples have poor knowledge.

Conflict of Interest- None

Source of Funding- Self

Ethical Clearance- Ethical clearance was taken from ethical committee of Sharda University. Consent was also taken from Subjects before conducting research.

References

- Priyadarshini T, Jeyabharti, Pranesh. A study to assess the effects of pranayama on quality of life (QoL) and blood pressure among menopausal women in the urban community. *International Journal of Advance Research in Community Health Nursing*. 2020; 2(2): 19-21
- Shenbagam. C. A study to assess the outcome of pranayama on menopausal symptoms among menopausal women in selected setting [dissertation]. Tamil Nadu: The Tamil Nadu DR. M.G.R. Medical University; 2012
- Swain D, Nanda P, Das H. Impact of yoga intervention on menopausal symptoms-specific quality of life and changes in hormonal level among menopausal women. *The Journal of Obstetrics and Gynaecology Research*. 2021; 47(10): 3669-3671
- Cramer. H, Lauche. R, Langhorst J and Dobos G. Effectiveness of Yoga for Menopausal symptoms: Systematic review and meta-analysis of randomized controlled trial. *Evidenced based complementary and alternative medicine*. 2012; 2012
- Kirkwood G, Rampes H, Tuffrey V, Richardson J, Pilkington K. Yoga for anxiety: a systematic review of the research evidence. *British Journal of Sports Medicine*. 2005;39(12):884–891
- Yang K. A review of yoga programs for four leading risk factors of chronic diseases. *Evidence-Based Complementary and Alternative Medicine*. 2007;4(4):487–491.

7. Bussing A, Ostermann T, Ludtke R, Michalsen A. Effects of yoga interventions on pain and pain-associated disability: a meta-analysis. *Journal of Pain*. 2012;13(1):1-9.
8. Cramer H, Lauche R, Haller H, Dobos G. A systematic review and meta-analysis of yoga for low back pain. *Clinical Journal of Pain*. In press.
9. Newton. KM et al. Efficacy of Yoga for Vasomotor symptoms: A Randomized Controlled trial. *Menopause: The Journal of North American Menopause Society*. 2014; 21 (4): 339-346
10. Vora. R, Dangi. A. Effects of Yoga on Menopausal symptoms on early menopausal period: A randomized controlled trial. *Indian Journal of Physiotherapy and Occupational therapy*. 2014; 8 (3): 49-53