

The Impact of Yoga on Blood Pressure in Vijayawada Women

K. Santhi¹, Dr. Narender Kumar²

¹Research scholar, OPJS University Churu, Rajasthan

²Associate Professor, Dept of Yoga from OPJS University Churu, Rajasthan

ABSTRACT

Menstrual abnormalities are known to affect women at all stages of their reproductive lives, from menarche (when menses begin) to menopause (when menses stop). A typical menstrual cycle lasts between 25 and 35 days, with bleeding lasting 4 to 6 days and MBL of 30 to 50 ml. At the extremities of reproductive life, i.e., after menarche and before menopause, the median menstrual cycle length varies. Because of the poor functioning of the ovaries and the immaturity of the pituitary gland, menstrual cycles are sometimes protracted and unpredictable right after menarche, but by the time a woman is 18 to 20 years old, the cycles become predictable. Except for a few months after an abortion or delivery (the breastfeeding period), menstrual cycles are often normal in women of childbearing age (20 to 35 years). Menstrual irregularity is more prevalent in the later reproductive years and signals the start of perimenopause.

I Introduction

Menstrual abnormalities during menopause are caused by a natural decline in healthy oocyte numbers. The remaining oocytes in the ovary are not as competent, thus the natural hormone balance cannot be maintained. Menstrual disorder affects the vast majority of women throughout their reproductive years. Changes in the duration of time between menstrual cycles are a common symptom of perimenopause. There are two distinct phases of the perimenopause: Menstrual periods may be shorter or longer than normal during early perimenopause. Menstrual cycles become more drawn out and irregular as a consequence of the late perimenopause. Some women have prolonged, excessive menstrual bleeding that need urgent medical intervention.

Estrogen and progesterone (both produced by the ovaries) maintain a healthy equilibrium, resulting in regular menstrual cycles. The endometrium (uterine lining) responds erratically during perimenopause because of disruptions in the regular hormonal sequence. The ovary is the primary source of estrogen in most premenopausal women. However, extra adipose (fat) tissue in overweight women also generates a lot of estrogen. Endometrial thickening and abnormally excessive bleeding may arise from estrogen acting without any counteracting hormones. It's possible that some of the alterations in the endometrium might progress to cancer. Fibroids, polyps, adenomyosis, ovarian tumors, and pelvic infections are all examples of anatomical alterations that may lead to abnormal and excessive menstrual flow. There are a number of different types of menstrual dysfunction that can occur during perimenopause, including regular periods accompanied by excessive cyclic bleeding, short menstrual periods accompanied by normal or excessive bleeding, irregular and non-cyclic prolonged periods accompanied by scanty or excessive bleeding, and so on. When you hit middle age, it seems like every day adds another day to your age. Birthdays are not evening that people anticipate with excitement. The years around midlife are a challenging, stressful, and socially uncomfortable time. They experience the BLUES, which include irritability, lethargy, mood fluctuations, despair, and a loss of sleep, confidence, motivation, and libido since they are stuck between the two great generations. The "Empty-Nest Syndrome" just makes things worse. When one's children leave home for work, school, or marriage, it may be devastating to the mother left behind. Crying episodes and thoughts of suicide may also be present.

II Culture and Human Behavior

Man has become more analytical, imaginative, sensitive, and obsessed as a result of scientific and technological development. Because of this, tension began to build up. The spread of modern disease in the modern world is increasing. Stress. The stress has been really taxing. The problems that plague humanity today are mostly self-inflicted. Causes of stress in today's society include strained interpersonal connections, ego clashes at work, and pretty concerns at home. People no longer have the luxury of time to invest in their relationships or engage in regular self-reflection to de-stress as a result of the increasing demands of work and the cutthroat nature of the modern business world. When we feel frightened or overwhelmed, our bodies respond by

releasing stress hormones. Many individuals are very stressed due to the growing number of responsibilities at home and in the workplace. The tension you feel in one place might transfer to another. Tension enhances flavor. Stress may be helpful if it's managed properly. It might provide the extra incentive we need to give it our all and maintain high levels of concentration and mental acuity. But when things go rough and the demands of life are more than we can handle, stress becomes a danger to our bodily and mental health. Life would be boring and without tension. However, excessive stress may have devastating effects on our bodies and minds. Up to 80% of sickness may be attributed to stress, and this is not a new concept. To paraphrase Plato, who made this statement more than 2000 years ago: "all diseases of the body proceed from the mind or soul." The "wear and tear" our bodies go through trying to keep up with an ever-evolving environment is what scientists refer to as stress, and it may have both beneficial and harmful impacts on our bodies and minds. Stress may be a motivating factor; it can bring about enlightenment and fresh viewpoints. Anxiety, despair, and physical symptoms including headaches, stomachaches, skin breakouts, lack of sleep, ulcers, high blood pressure, and cardiovascular disease are all linked to this detrimental effect. Changes in our life, such as the loss of a loved one, the arrival of a new baby, a promotion at work, or the beginning of a new romantic relationship, may cause us stress. Stress may either aid or impede this process of adaptation, depending on how we choose to deal with it.

III RESEARCH METHODOLOGY

In Berlin, at the Centre for Epidemiological and Health Research, Lothar A.J. Heinemann created the MRS scale. This scale is divided into three sections, or domains. This meter is a Likert scale that conforms to psychometric standards, with 11 items and 5 rating points. Four components pertain to the soma to-vegetative system, three to the psychological system, and three to the urogenital system. The existence of symptoms is used to assign points.

The author has made the scale available for download and use by anybody doing research at no cost to them on their website. Non-funded academic users may access it for free. (Addendum: M)

The scale runs from 0 (no effect) to 4 (extreme effect).

The Menopause-Specific Quality of Life (MENQOL) Questionnaire is a Standardized

Measure.

One such standardized and targeted instrument is the Menopause-Specific Quality of Life (MENQOL) Questionnaire created by Hilditch et al. It's so popular that it's been localized into 15 tongues so far. The author has waived all royalties and distribution costs, making the tool available for free to anybody doing unfunded scholarly research. (L - Annexed). Vasomotor - 3 things (1-3), Psychosocial - 7 items (4-10), and Other 15 objects from the physical realm (numbers 11–25) and 2 from the sexual realm (numbers 26–27). A score will be assigned based on the presence or absence of symptoms. If a woman does not experience a particular symptom, she marks "no" on the questionnaire, and if she does experience the symptom, she rates its severity on a scale from 0 to 6. To facilitate statistical analysis, we normalized the item scores to a scale from 1 to 8 as follows:

For "no," "2" for "yes," "not bothered," through "8" for "yes," "extremely bothered," the questionnaire score ranges from "1" for "not bothered" to "8" for "very bothered." Key for Scoring Absence of Symptoms = 1, Presence of Symptoms = 2-6, Presence of Symptoms = 5-6 = 7,8, Presence of Symptoms = 5-6 = 7,8

Data Analysis and Presentation

After administering Yoga to a group of women with menopausal symptoms, the researcher measured their happiness with the practice using a satisfaction rating scale she developed.

The average age of women who experienced menopause naturally was 46.9, as shown in Table 4.

4.0 years in the Yoga group and 47.03.5 years in the non-Yoga group. There was no statistically significant difference between them. There was also no statistically significant difference ($P > 0.05$) between the two groups with respect to mean current age (52.9 6.3 vs. 52.8 6.2) or length of menopause (6.1 5.2 vs. 5.9 5). Since the two groups had similar ages, it follows that the demographic data listed above were also similar.

Table. 5 Chi-square values, frequencies, and percentages for categorical clinical variables comparing Yoga and non-Yoga practitioners of menopause.

Clinical Variables (categorical)	Components	Yoga group (n=108)		Non-Yoga group (n=120)		χ^2	df	Sig
		f	%	f	%			
Breast examination Findings	Soft, Normal	108	100.0	120	100.0	Nil	Nil	Nil
	Others	Nil	Nil	Nil	Nil			
Fracture History	Nil	102	94.4	113	94.2	0.008	1	P>0.05
	Yes	6	5.6	7	5.8			
	Coffee / Tea	70	64.8	80	66.7			
Dietary History	Soft drinks	26	24.1	26	21.7	0.218	3	P>0.05
	Both	10	9.3	12	10.0			
	Nil	2	1.9	2	1.7			

Table 5, Figure 7, and Figure 8 show that between the Yoga and Non-Yoga groups, 74.1 and 77.5% of premenopausal women experienced menstrual irregularity, 100 percent had normal breast examination findings, 94.4 and 94.2 percent had no history of fractures, 64.8% and 66.7% drank coffee and tea, and 37.0% and 37.5% of postmenopausal women had diabetes. None of the groupings diverged significantly from one another (P>0.05). Therefore, it seemed that the two groups were similar and consistent.

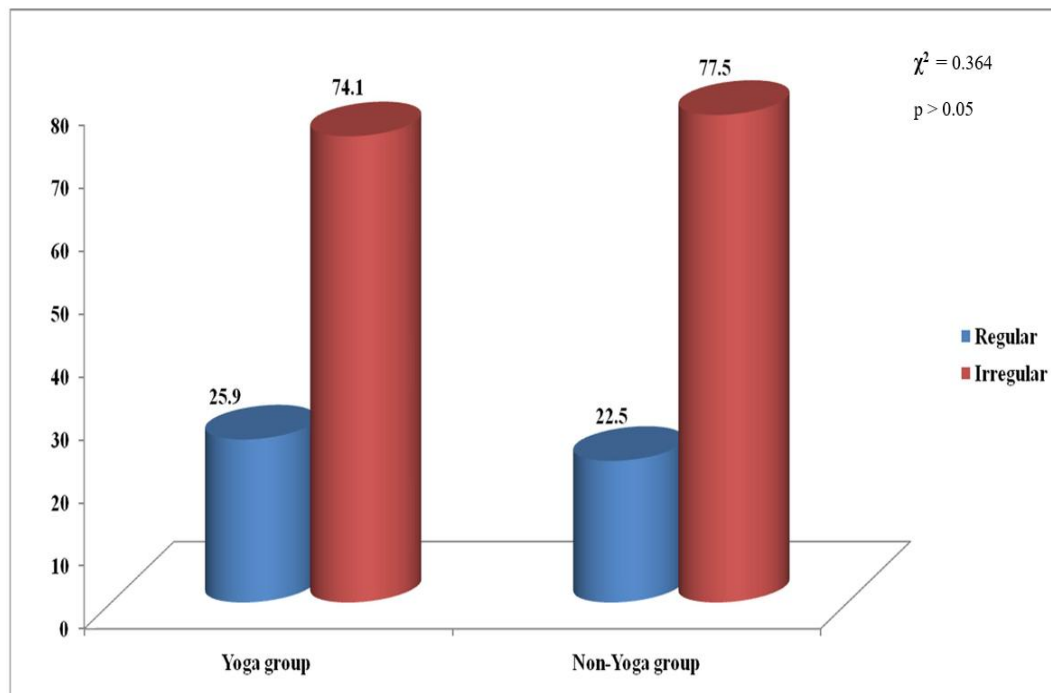


Fig. 4 Menopausal women's menstrual cycle types before menopause as a percentage distribution

The following describes the impact of Yoga on MENQOL in the Yoga and Non-Yoga groups: The mean MENQOL of the Yoga group was 147.114.5 before Yoga, and 57.015.1. The average decrease was 90.1%±2.8, and the significance level of this difference was quite high ($P < 0.001$). The Non-Yoga group's mean MENQOL score was 147.513.9 before yoga, but only 140.513.1 after. The average decrease was 7.0% (SD = 4.9), and this was statistically significant ($P < 0.001$).

Since yoga alleviates so many illnesses, it plays a significant role in raising people's standard of living. Yoga classes for groups might potentially help people feel more emotionally stable, which would have positive effects on their health. The vasomotor system seems to be particularly amenable to yoga's management. In this category, the Yoga group significantly improved above the control group in terms of hot flashes, nocturnal sweats, and total sweating. Considering the challenges of dealing with symptoms in the vasomotor domain and how they impact one's quality of life, the practice of yoga proved beneficial.

Aches in the muscles and joints (34.6%), hot flashes (33.3%), trouble sleeping (28.9%), and mood swings (25.2%) were reported as the most common menopause-related symptoms in a study by Benner and Falah (2014), which evaluated the quality of life specifically related to menopause.

Consistent with previous research by Nayak et al., we found that the mean scores across all dimensions decreased significantly (P 0.001) in the Yoga treatment group, whereas only the physical and psychosocial domains decreased significantly (P 0.001) in the control group. The 'effect size' for the Yoga treatment group was larger than that of the control group across all measures. The mean total ratings across all dimensions revealed that the Yoga treatment group had significantly higher quality of life than the control group (P 0.001).

Menopausal symptoms and quality of life in Yoga and non-Yoga practitioners: a before-and-after study.

The current research presents a picture of the connections between pre- and post-tests on the MRS and MENQOL domains for the Yoga and Non- Yoga groups. There was a positive correlation (P0.001) between the somatic, psychological, and urogenital dimensions of the Yoga group's pretest MRS and their corresponding MENQOL categories. After the Yoga intervention, there was a significantly higher correlation between the somatic domain of MRS and the MENQOL (vasomotor and physical domain) in the Yoga group than in the non-Yoga group (0.409), the psychological domain of MRS and the MENQOL (psychosocial) domain of MRS (0.225), and the urogenital domain of MRS and the MENQOL (sexual) domain of MRS (0.512). The post-test results for the Yoga class split the subjects into three groups: 16.7%, 5.1%, and 26.2%. Except for the psychological domain, there was a positive correlation between the pre MRS categories and their corresponding MENQOL domains (P0.001) in the non-Yoga group.

CONCLUSIONS

The women of a country are a reflection of that country's culture. Today's women are more enlightened than ever before, and they're making strides in every field thanks to the advancements made possible by modern science. The days of questioning women's bravery and competence and hence dismissing them as unsuitable are over. They have invaded every available space today. Whether doing professional or unskilled work, physical or mental, women have consistently shown their worth and value in society. Women are doing traditionally male-dominated vocations like bus driving, auto-rickshaw driving, and becoming an astronaut in the Indian context. Modern women have greater opportunities for education and advancement, and they

wear several hats in addition to those traditionally held by men. Most significantly, she is able to pull off all her responsibilities successfully because of her intrinsic abilities, as well as her keen awareness and strategic thinking. Women in India are starting to seek equal rights with males, much like their Western counterparts. It's encouraging to see women succeeding in traditionally male-dominated professions like research and development, design and development, manufacturing, and marketing. Her business acumen is more evidence of her independence. The current condition of affairs for women is one of flux. Transition from the conventional to the contemporary. However, the 'modern' has arrived without wholly replacing the 'traditional. Some of the old customs persist today. So, the modern woman is a hodgepodge of traditional and emerging 'modern' elements. Obviously, she hasn't made up her mind on which beliefs to hold onto and which to abandon. She doesn't see why she should embrace all things modern while rejecting all things conventional. Despite her best efforts, she just can't keep up with everything expected of her. Women have unique impacts at this time of transition, which may leave them under a tremendous deal of stress. The sample was drawn from a representative cross-section of the 75 women and 25 men of varying ages who regularly attend yoga classes at the Rattus Ramana Maharshi Yoga School and Research Centre in Guntur. The impact of yoga training on the sample was investigated using a quasi-experimental design. The sample receives 30 nights of yoga instruction. The investigator's own questionnaire is used to collect and analyze baseline and follow-up data. Praying, suryanamaskarams, yoga asanas, pranayama, meditation, the yogic diet, and philosophical discussions are all part of a well-rounded yoga practice. Statistical approaches are used to compile and tabulate all of the scores. The data are interpreted when we acquire the findings.

REFERENCES

1. Asana Andiappan Sundara Yoga & Natural living development trust. (2010). Textbook of certificate course in yoga and naturopathy. Chennai. Asana publications. *ISSN:2277-8179*.
2. Baber, R. (2015). Menopausal hormone therapy and ovarian cancer, *J Midlife Health*. *ISSN: 0217-9792*, 6(3). 101-3.
3. Asghari, M. Mirghafourvand, M. Charandabi, S. Malakouti, J. and Nedjat, S (Feb 24th 2016). Effect of aerobic exercise and nutrition education on quality of life and early menopause symptoms: A randomized controlled trial. *Women Health*.

ISSN;2222-3959. pp.1-16

4. Bagga, (2004). Age and symptoms of menopause. *Obstetrics & Gynecology Today*, ISSN: 0976-3392, 9(8),301-302.
5. Bemil, L G & Venkatesan, L & Shobana, G. (June 2013) Effectiveness of soya milk upon menopausal symptoms. *Tamil Nādu Nurses and Midwives Council – Journal of Community Health Nursing*. ISSN: 0972-2378, 1(1), pp 17-19.
6. Bhavanani, AB. (2008). A primer of Yoga theory for Yoga sports, Yoga teachers and Yoga students. 3rd edition, Puducherry: Dhivyananda creations.
7. Black, JM. Hawks, JH. & Keene, AM. (2006) Medical surgical nursing. 6th ed. Philadelphia: Elsevier Mosby: ISSN: 0077-5394.
8. Blackledge, J. (2012). Keeping up with yogic traditions: Does it matter? *Asana – International Yoga Journal*. ISSN 2095-4344, 119, 20-21.
9. Bener, A & Falah, A. (2014). A measurement –specific quality-of-life satisfaction during premenopausal, perimenopause and post menopause in Arabian Qatari women. *J Mid-life Health*. ISSN 1982-0275. 5(3), 126-34.
10. Boice, J. (2006). Menopause with science and soul: A guide book for navigating the journey. Toronto: Celestial Arts. ISSN:2304-3881.
11. Borker, S. & Bhat, S. (Mar 2014). Letter to Editor – Commentary on following of menopausal guidelines by practitioners in Indian setting. *J Mid-life Health*, ISSN:2304-3881, 5(10), 49 – 5.
12. Bouchez, C. (2005). Your perfectly pampered menopause – Health, Beauty and lifestyle advice for the best years of your life. New York: Broadway books.
13. Bushman, B. & Young JC. Action plan for Menopause – Your guide to a healthy vibrant transition. USA: Human kinetics. ISSN: 1413-8271.
14. Cone, FK. (1993). Making sense of Menopause: over 150 women and experts share their wisdom, experience and commonsense advice. New York: A Fireside book. ISSN 1526-5471.
15. Cohen, BE. Kanaya, (AM). Macer, JL. Shen,H. Chang, AA and Grady D. (2007). Feasibility and acceptability of restorative yoga for treatment of hot flashes: a pilot trial. *Maturitas*. 56(2), 198-204. Epub 2006 Sep 18. ISSN: 0212-1611.