



# INTERNATIONAL JOURNAL OF TRENDS IN EMERGING RESEARCH AND DEVELOPMENT

INTERNATIONAL JOURNAL OF TRENDS IN EMERGING RESEARCH AND DEVELOPMENT

Volume 2; Issue 3; 2024; Page No. 220-223

Received: 01-02-2024

Accepted: 09-03-2024

## To study the psychological well-being analysis after 8 weeks of integrated yoga therapy

<sup>1</sup>Dongare Smita Devanand and <sup>2</sup>Dr. Yugal Kishore

<sup>1</sup>Research Scholar, Department of Psychology, Maharaja Agrasen Himalayan Garhwal University, Uttarakhand, India

<sup>2</sup>Professor, Department of Psychology, Maharaja Agrasen Himalayan Garhwal University, Uttarakhand, India

Corresponding Author: Dongare Smita Devanand

### Abstract

The 400 B.C. Indian sage Patanjali is credited with creating yoga, a significant area of Indian philosophy. The sage Patanjali's "Patanjala Yoga Sutra" is among the oldest texts in existence and the first written account of yoga. Eight elements make up Patanjali's "Astanga yoga": Yama, Niyama, Asana, Pranayama, Prathyahara, Dharana, Dhyana, and Samadhi. In addition to providing good health, strength, balance, vitality, and mental clarity, these physical and psychological symptoms are linked to chronic human diseases and all contribute to improving the quality of life at every stage of life. With the assistance of a trained statistician, the gathered data was examined using statistical software, SPSS Version 15, at a 5% level of statistical significance. To ascertain the differences in the two groups following the twelve weeks, the individual variables were assessed. To determine the relationship between all the variables at the base level of the subjects in both groups, the baseline values for each variable in both groups were compared using an independent t-test and a chi-square test. The pre and after data were compared using repeated measure ANOVA. The primary benefits of yoga are that it is low-impact, low-speed, non-competitive, non-invasive, and safe for older women to do. The recommended practices can be carried out for any appropriate amount of time and almost anywhere. Unlike the majority of traditional fitness regimens, yoga offers instant advantages, such as calming and contented sentiments that promote sustained participation. Additionally, it provides menopausal women with affordable and acceptable therapies that show promise for enhancing physical and mental health as well as, eventually, for preventing and managing cardiovascular disease (CVD) and related chronic illnesses. Future study on the mechanism by which yoga produces these positive effects is highly promising.

**Keywords:** Low-Speed, Non-Competitive, Non-Invasive, Therapies, Menopausal

### 1. Introduction

In India, one in five women between the ages of 40 and 41 have gone through menopause, and the frequency rises quickly from there to 65% of women between the ages of 48 and 49 (National Family Health Survey 2005-2006). Even in India, the number of women in the menopausal age bracket is constantly growing as life expectancy rises. There are around 43 million menopausal women in India, according to the Indian Menopausal Society. According to statistics from a multi-centric survey carried out nationwide by the IMS in 2010, women's menopausal ages have shifted from 40 to 45 years old to 47 to 52 years old.

From menarche (the beginning of menses) until menopause (the end of menses), women are known to experience irregular menstruation at every stage of their reproductive lives. A typical menstrual cycle lasts 25 to 35 days, during

which there is 4–6 days of bleeding and 30–50 ml of menstrual blood loss (MBL). At the extremities of reproductive life, such as after menarche and before menopause, the median menstrual cycle length varies. Because of the pituitary gland's immaturity and the ovaries' poor functioning, menstrual cycles are frequently protracted and unpredictable right after menarche; however, by the time a person is 18 or 20 years old, the cycles have stabilized. With the exception of the lactation phase, which lasts for a few months following an abortion or delivery, menstrual cycles are typically regular for women between the ages of 20 and 35. Menstrual irregularities are more prevalent in the late reproductive years and signal the onset of perimenopause.

The physiologic loss or depletion of healthy oocytes is the cause of perimenopausal menstrual abnormalities. The

ovary's surviving oocytes are less competent and unable to maintain the proper hormone balance. The majority of women experience menstrual disruption that lasts until menopause, when their periods completely stop. Changes in intermenstrual durations during the perimenopause are likely to cause previously regular periods to become irregular. There are two phases to the perimenopause: Menstrual periods may be brief or protracted in the early stages of perimenopause. Longer intermenstrual intervals that cause longer and erratic menstrual cycles are a hallmark of the late perimenopause. Some women may experience excessive, prolonged menstrual bleeding that needs to be treated right away.

The appropriate equilibrium between the ovarian hormones progesterone and estrogen results in the regular cyclic periods. The endometrium, or inner lining of the uterus, responds erratically during the perimenopause when the usual hormonal sequence is disturbed. The ovary is the primary source of estrogen production in the majority of perimenopausal women. But the excess adipose (fat) tissue in obese women also generates a lot of estrogen. Unopposed estrogen action can thicken the endometrium, which can lead to heavy and irregular bleeding. A few of the endometrial alterations can be cancerous. Heavy and irregular menstrual flow can also be caused by other anatomical abnormalities such as ovarian tumors, polyps, adenomyosis, uterine fibroids, and pelvic infections. There are various types of menstrual dysfunctions during perimenopause, including irregular and non-cyclic prolonged periods with scanty or excessive bleeding, short periods with normal or excessive bleeding, and infrequent and delayed periods with normal or excessive and prolonged bleeding.

## 2. Review of Literature

Suramanjary (2016) <sup>[1]</sup> carried out a descriptive correlational study to link the quality of life and menopausal symptoms among women in Dharapuram. Purposive sampling was used in the study to select 50 women between the ages of 40 and 60. Menopausal symptoms (13.4, 6.8) and quality of life (13.3, 7.69) had mean and standard deviation, respectively. Therefore, it came to the conclusion that menopausal symptoms and quality of life were positively correlated in a highly significant way. ( $r = 0.8850$ ).

Using the Menopause Rating Scale as a screening tool for menopausal symptoms, Abou-Raya *et al.* (2016) <sup>[2]</sup> conducted a cross-sectional study to ascertain the frequency and factors influencing the severity of menopausal symptoms among Egyptian women. For this cross-sectional study, 540 women between the ages of 40 and 65 were enlisted. In addition to administering the Menopause Rating Scale questionnaire, demographic data was gathered. Joint and muscle pain were the most commonly reported symptoms (501, 92.8%), followed by urogenital symptoms (460, 85.2%). Participants' job status ( $r = 0.504$ ,  $P = 0.005$ ), number of children ( $r = 0.474$ ,  $P = 0.042$ ), and body mass index ( $r = 0.544$ ,  $P = 0.006$ ) were found to be significantly correlated with the frequency of menopausal symptoms.

Kulkarni, Savitha Rani, Kumar, and Manjunath (2016) <sup>[3]</sup> conducted a cross-sectional community-based study with 100 postmenopausal women between the ages of 40 and 65. Using a pretested structured proforma, information about

sociodemographic traits, postmenopausal symptoms, and factors related to them was gathered through interviews. The study's findings showed that the average age at menarche and menopause was  $46.7 \pm 5.2$  years and  $13.45 \pm 1.72$  years, respectively. Joint pain accounted for 92% of postmenopausal symptoms, with physical and mental tiredness (84%), melancholy (76%), irritability (73%), hot flashes, and night sweats (65%) following closely behind. Age, length of life after menopause, and postmenopausal symptoms were all significantly positively correlated.

A case study of a patient with stress urine incontinence and vulvo vaginal atrophy who was referred to a randomized clinical trial on Pelvic Floor Muscle training was carried out by Mercier, Morin, Lemieux, Reichetzer, Khalife, and Dumoulin (2016) <sup>[4]</sup>. She displayed VVA symptoms on the ICIQ Vaginal Symptoms and ICIQ-Female Sexual Matters connected with lower urinary tract Symptoms questionnaires during the pretreatment evaluation while on local ET. She also had VVA symptoms during the PFM's physical and dynamometric evaluation. A 12-week PFM training program was used to treat her. After 12 weeks of PFM training, the patient reported a higher quality of sexual life and a decrease in symptoms of dyspareunia and vaginal dryness. The tone and flexibility of the PFM's improved on physical evaluation after therapy, but other VVA symptoms stayed the same.

## 3. Objectives of the study

1. Psychological well-being analysis after 8 weeks of Integrated Yoga Therapy
2. After 8 weeks of Integrated Yoga Therapy, to determine the autonomic functions.

## 4. Research Methodology

This cohort study included 500 Indian women between 45-55 years of age who met the inclusion criteria. Also included were women who had undergone hysterectomy with preserved ovaries. The research omitted women unfamiliar with spoken English, with minimum Graduate in education, women undergoing hormone replacement therapy (HRT), gynecological disorders such as endometriosis, fibroids, ovarian cysts, prolapsed uterus, etc., or other medical conditions (such as hypertension, diabetes mellitus, hypo / hyperthyroidism) and those undergoing psychiatric medication. The thesis was conducted at the University of Yoga, Swami Vivekananda Yoga Research Foundation (SVYASA), Pune, India. The institutional oversight board and the university's ethical committee received formal approval for the report. The knowledge was gathered from different locations (banks, school and college employees, women's clubs and outpatient gynecology clinics). The women who met the requirements for inclusion were enrolled and informed consent was obtained. The respondents were asked to complete the Menopause Rating Scale and the Greene Climacteric Scale and were told that their answers would be kept confidential. With the assistance of a trained statistician, the gathered data was examined using statistical software, SPSS Version 15, at a 5% level of statistical significance. To ascertain the differences in the two groups following the twelve weeks, the individual variables were assessed. To determine the relationship between all the variables at the base level of the

participants in both groups, the baseline values for each variable in both groups were compared using the independent paired t-test and the Chi-square test. The pre and after data were compared using repeated measure ANOVA.

The findings indicate that the integrated approach to yoga therapy (IAYT) in peri-menopausal women may be one of the favored non-hormonal, life-style changing regimes. With its practitioners mushrooming across the globe, Yoga has been spreading worldwide. In the globally acclaimed novels, medical journals, therapy-oriented magazines, it has made its entrance. In women with positive outcomes, complementary and holistic treatments have been the favored treatment modality after hormone replacement has been shown to be dangerous for the treatment of perimenopausal symptoms. Yoga is considered to be one of the most relevant, cost-effective, complementary and alternative therapies without any side effects (if carefully practiced) and provides much more than mere healing. In order to deal with the psychological and somatic symptoms of

environment, the practice of yoga has a philosophical foundation and effective techniques.

## 5. Results and Data interpretation

In order to rule out any significant psychological discomfort, this tool was employed to screen the patients for general health disorders. The "cut off score" for this study was 6. Table displays the baseline median score. Yoga and the control group did not differ significantly [ $p>0.05$ ].

**Table 1:** Scores of general health questionnaire in both the groups

| Yoga(n=250) |     | Control (n=250) |     | P Value |
|-------------|-----|-----------------|-----|---------|
| Median      | IQR | Median          | IQR |         |
| 1.00        | 0,3 | 2.00            | 0,6 |         |

Meno pausal specific quality of life questionnaire:

Table summarizes the prevalence of perimenopausal symptoms among all study participants (n = 500) based on this questionnaire.

**Table 2:** Prevalence of perimenopausal symptoms in four domains of menqolquestionnaire

| Domain        | Symptoms                                 | N=500 | Percentage (%) |
|---------------|--|-------|----------------|
| Vaso-motor    | Hot flashes or flushes                   | 183   | 36.6%          |
|               | Nightsweats                              | 141   | 28.2%          |
|               | Sweating                                 | 238   | 47.7%          |
| Psycho-social | Being dissatisfied with my personal life | 148   | 29.6%          |
|               | Feeling anxious or nervous               | 98    | 39.4%          |
|               | Experiencing poor memory                 | 377   | 75.5%          |
|               | Accomplishing less than I used to        | 259   | 51.9%          |
|               | Feeling depressed down or blue           | 192   | 38.4%          |
|               | Being impatient with other people        | 157   | 31.5%          |
|               | Feeling wanting to be alone              | 162   | 32.4%          |
|               | Flatulence (wind) or gas pain            | 278   | 55.6%          |
| Physical      | Aching in muscles and joints             | 296   | 59.3%          |
|               | Feeling tired or worn out                | 349   | 69.9%          |
|               | Difficulty sleeping                      | 236   | 47.2%          |
|               | Aches in back of neck or head            | 137   | 55.1%          |
|               | Decrease in physical strength            | 333   | 66.7%          |
|               | Decrease in stamina                      | 328   | 65.7%          |
|               | Feeling of lack of energy                | 259   | 51.9%          |
|               | Drying skin                              | 173   | 34.7%          |
|               | Weight gain                              | 217   | 43.5%          |
|               | Increased facial hair                    | 58    | 11.6%          |
|               | Changes in skin texture or tone          | 111   | 22.2%          |
|               | Feeling bloated                          | 210   | 42.1%          |
|               | Low backache                             | 271   | 54.2%          |
|               | Frequent urination                       | 153   | 30.6%          |
|               | Involuntary urination                    | 210   | 42.1%          |
| Sexual        | Changes in sexual desire                 | 320   | 29.6%          |
|               | Vaginal dryness                          | 127   | 25.5%          |
|               | Avoiding intimacy                        | 143   | 28.7%          |

The psychological domain of our study participants was characterized by a high prevalence of poor memory (75.5%) and accomplishing less than I used to (51.9%), while the physical domain included urinary incontinency (42.1%), flatulence (55.6%), aches in the back of the neck or head (55.1%), low back ache (54.2%), difficulty sleeping (47.2%), feeling bloated (42.1%), and aches in muscles and joints (59.3% and 59.3%, respectively). They responded very poorly to symptoms in the sexual area and had less vasomotor symptoms, such as hot flashes (36.6%) and

nocturnal sweats (28.2%).

In addition to these twenty-nine questions, we additionally gathered answers for three more symptoms: headache, dizziness, and palpitations. This is because we frequently encounter the prevalence of these symptoms in our practice. The following Table summarizes the prevalence of these three symptoms based on the same pattern of data collection. Over half of the ladies who participated reported having a headache as their main symptom.

**Table 3:** The prevalence of other three symptoms in the respondents

| Variable             | Symptoms    | N=500 | Percentage (%) |
|----------------------|-------------|-------|----------------|
| Other three symptoms | Palpitation | 176   | 35.2%          |
|                      | Headache    | 271   | 54.2%          |
|                      | Dizziness   | 187   | 37.5%          |

Of the 500 women in the study, 278 presented with vasomotor symptoms, 453 with psychosocial symptoms, 479 with somatic symptoms, 208 with sexual symptoms, and 354 with the remaining three. Physical domain symptoms were most common (95.8%), followed by psychosocial symptoms (90.7%), the other three symptoms (70.8%), and vasomotor symptoms (55.6%). Sexual domain symptoms were the least common (41.7%).

**Table 4:** The summary of the prevalence of the perimenopausal symptoms in each Domain.

| Domain               | n=500 | Percentage (%) |
|----------------------|-------|----------------|
| Vasomotor            | 278   | 55.6%          |
| Psychosocial         | 453   | 90.7%          |
| Physical             | 479   | 95.8%          |
| Sexual               | 208   | 41.7%          |
| Other three symptoms | 354   | 70.8%          |

The prevalence of perimenopausal symptoms by group for each domain is displayed here, along with baseline comparisons between the groups.

## 6. Conclusion

In this study, we collected detailed data on perimenopausal women in the Udupi district of Karnataka state, India, who were between the ages of 40 and 60. There aren't any noteworthy research on the quality of life of perimenopausal women from this part of the subcontinent. Both the yoga and exercise groups were homogeneous, as seen by the baseline data for every measure showing no discernible variations between them. Both groups were deemed suitable to undergo the interventional treatment since the general health questionnaire revealed no discernible psychological disturbance.

All symptoms are categorized into four dimensions by the MENQOL questionnaire utilized in this study. Previous studies have shown that women from diverse geographic and ethnic backgrounds report symptoms in these four domains in significantly varied ways. It is also well recognized that these symptoms can begin very early in a woman's reproductive life, even if she is regularly menstruating, and they can persist for many years following menopause.

## 7. References

1. Suramanjary J. A System's Evaluation of Global History of Indian Architecture. <https://copalpublishing.com>; c2016.
2. Abou-Raya S, Sadek S, AbelBaqy M, ElSharkawy O, Bakr L, Ismail K, *et al.* Relationship between sociodemographic, reproductive, and lifestyle factors and the severity of menopausal symptoms among Egyptian women in Alexandria. *Menopause*. 2016;23(8):888-93.
3. Manjunath BA. Partial replacement of E-plastic waste

as coarse-aggregate in concrete. *Procedia Environmental Sciences*. 2016 Jan 1;35:731-739.

4. Dumoulin C, Adewuyi T, Booth J, Bradley C, Burgio K, Hagen S, *et al.* Adult conservative management. *Incontinence*. 2017;2:1443-628.
5. Borker S, Bhat S. Letter to editor – Commentary on following of menopausal guidelines by practitioners in Indian setting. *Journal of Mid-life Health*. 2014;5(1):49–50.
6. Bouchez C. *Your Perfectly Pampered Menopause: Health, Beauty and Lifestyle Advice for the Best Years of Your Life*. New York: Broadway Books; c2005.
7. Bushman B, Young JC. *Action Plan for Menopause: Your Guide to a Healthy Vibrant Transition*. Champaign (IL): Human Kinetics; c2006.
8. Cone FK. *Making Sense of Menopause: Over 150 Women and Experts Share Their Wisdom, Experience and Commonsense Advice*. New York: Fireside Books; c1993.
9. Cohen BE, Kanaya AM, Macer JL, Shen H, Chang AA, Grady D. Feasibility and acceptability of restorative yoga for treatment of hot flashes: a pilot trial. *Maturitas*. 2007;56(2):198–204. Epub. 2006 Sep 18.
10. Cramer H, Lauche R, Langhorst J, Dobos G. Effectiveness of yoga for menopausal symptoms: a systematic review and meta-analysis of randomized controlled trials. *Evidence-Based Complementary and Alternative Medicine*. 2012;2012:1-10.
11. Crawford AM. *The Natural Menopause Handbook*. 1st rev. ed. Berkeley (CA): Crossing Press; c2000.
12. Dutta R, Dcruze L, Anuradha R, Rao S, Rashmi MR. A population-based study on the menopausal symptoms in a rural area of Tamil Nadu. *Journal of Clinical and Diagnostic Research*. 2012;6(4):597–601.
13. Dutta R, Dcruze L, Anuradha R, Raja DR. Study on influence of chronic health problems on menopausal symptoms. *International Journal of Recent Trends in Science and Technology*. 2014;12(1):95–98.
14. Eskin BA. *The Menopause: Endocrinologic Basis and Management Options*. 5th ed. London: Informa Healthcare; c2007. Executive summary: Stages of Reproductive Aging Workshop (STRAW). *Medscape*. 2002 Apr 4.
15. Franco OH, Chowdhury R, Troup J, Voortman T, Kunutsor S, Kavousi M, *et al.* Use of plant-based therapies and menopausal symptoms: a systematic review and meta-analysis. *JAMA*. 2016;315(23):2254–2263.
16. Fraser T. *Yoga for You: The Complete Practical Guide to Yoga from One of Its Most Inspiring Teachers*. London: Watkins Publishing; c2010.
17. Galeon GA. Correlates of the health statuses of the faculty at midlife. *Journal of Mid-life Health*. 2016;7(1):15–21.

### Creative Commons (CC) License

This article is an open access article distributed under the terms and conditions of the Creative Commons Attribution (CC BY 4.0) license. This license permits unrestricted use, distribution, and reproduction in any medium, provided the original author and source are credited.