Improvement in Sleep Quality of Perimenopausal Woman After Om Chanting During Covid-19 Pandemic Lockdown
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ABSTRACT
The aging process is associated with physiological changes that affect sleep. In perimenopausal woman, undiagnosed and untreated insomnia may lead to impaired daily function and reduced quality of life. In the COVID-19 lockdown scenario, the stress and tension of remaining continuously at home and working from home for long time periods without taking a break has been a physical and mental burden to women. Many women experience sleep problems during perimenopause which in turn results in irritability, mood swings, aggression, anxiety and various other problems. OM chanting is a practice that uses the transformational power of OM to activate self-healing potential. It reduces stress and relaxes the body. It is one of the major exercise that calms the body through rhythmic pronunciations and vibrations. Therefore, in this study the effect of OM chanting on the sleep quality of perimenopausal woman was assessed. Thirty-five healthy women practiced OM chanting twice a day for two weeks. Sleep quality was assessed using Pittsburgh sleep quality index (PSQI) both before and after practicing Om chanting. All the subjects showed significant improvements in a range of subjective factors, including overall sleep quality, sleep efficiency, sleep duration and self-assessed sleep quality resulting in the overall improvement in the PSQI score. Thus OM chanting was a safe and simple remedy for improving the quality of sleep in perimenopausal woman.

Key words: OM chanting, Pittsburgh scale, perimenopausal woman, sleep


INTRODUCTION:
Yoga has increasingly been gaining popularity in recent times. It is a Sanskrit word with the root “yuj” which means to join¹. Physical activity consisting of a large number of asanas is usually termed as yoga. It means the union of the individual soul with the parramatma. It is said to have immense effect on our body. It involves lot of poses, breathing exercise and meditations which plays a major role in bringing relaxation to the individual’s

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body and mind. Practicing yoga is one of the effective treatments for stress, depression, anxiety to a greater extent which in turn would help from the attack of various diseases\(^2\). It reduces the heart rate, oxygen consumption, improves exercise capacity and atherosclerotic risk markers\(^3\). In women, it is known to prevent obstetric complications.

Om means a sacred sound. Om Chanting is one of the major exercises that calm the body through rhythmic pronunciations and vibrations. This usually gives a feel of tying up the whole universe. The best time to practice this is usually during the morning hours. Regular practices improve the working of the heart. While chanting Om, deep vibration quality is felt by the individuals and thus it’s a symbol of deep realities\(^4\). It is traditionally practiced at the beginning and end of the yoga sessions. This also helps in sharing positive vibrations as it releases negativity and puts up a positive vibration in individuals body\(^5\). It improves individual’s concentration and focus and helps in strengthening of supporting muscles in your body mainly in the spinal cord\(^6\). Thus it has a valuable effect on health and helps one to lead a happy life.

In the COVID-19 lockdown scenario, the stress and tension of remaining continuously at home and working from home for long time periods without taking a break has been a physical and mental burden to women. Women especially at the perimenopausal stage go through a lot of autonomic alterations which in turn affects them physically and emotionally leading to changes in quality of sleep. In our previous study, Om chanting was found effective in improving depression, anxiety and stress in elderly women\(^7\). While performing Om chanting, one can simply feel the changes occurring in the body and mind. This practice is not time consuming and it is cost ineffective. Therefore, in this study, we wanted to assess the efficacy of OM chanting in improving the sleep quality in perimenopausal women during the COVID-19 lockdown scenario.

**MATERIALS AND METHODS:**

**Study Design:**

The quasi experimental study on Om Chanting and its effects on improving the sleep quality was investigated among perimenopausal women after obtaining Institutional ethical clearance (SMC/IEC/2020/03/006) in a tertiary care hospital in Southern India.

**Study Participants and Sample Size:**

A total of 45 women who were undergoing the perimenopausal symptoms in the age group of 40 to 55 years attending the O/P of a tertiary care hospital during the months of February and March 2020 who were willing to participate in the study were included. A written informed consent was obtained from them before initiating the study. People who were already practicing yoga, having stroke, dementia, psychosis, respiratory disorder, anxiety disorder, visual impairment and hypertension were excluded from the study. The study was clearly explained to the participants and information sheet regarding the study was given to all the study participants. Demographic details regarding name, age, sex was collected.

**Administration of Pittsburgh Sleep Quality Index\(^8\):**

Detailed instructions were provided to the all the participants prior to the filling of the questionnaires and all doubts were clarified. All the participants filled the questionnaire twice, once before the Om chanting intervention and a second time after the completion of intervention. Complete confidentiality was maintained throughout the study. The filled questionnaires were collected back for grading.

The Pittsburgh Sleep Quality Index contains 19 self-rated questions which are combined to form seven component scores covering different aspects of sleep. Component 1 is subjective sleep quality, component 2 is
sleep latency, 3 is sleep duration, 4 is habitual sleep efficiency, 5 is sleep disturbances, 6 on sleep medication and 7 on daytime dysfunction. Each component has a range of 0-3 points with a score of “0” indicating no difficulty and “3” indicating severe difficulty. The seven component scores are added to yield a global PSQI score with a range of 0-21 points, with “0” indicating no difficulty and “21” indicating severe difficulties in all areas.

**Procedure for Om chanting**

The subjects were asked to sit in Sukhasana position and to take a deep breath and relax their body as instructed by an experienced Yoga practitioner. They were asked to gently close the eyes by dropping the eyelids and were instructed to inhale gently and deeply, during exhaling produce sound Om. The subjects were instructed to do Om chanting twice a day for 10 minutes between 6:00 am to 7:00 am during the morning hours and between 5:00 pm to 6:00 pm in the evening hours. After chanting, subjects were instructed to take a deep breath slowly and open the eyes. This procedure was done for 14 days (7 days/week). Regular online follow up of the intervention was done to make sure the subjects were following the Om chanting regimen.

**DATA ANALYSIS:**

Data was analysed by SPSS 20.0. The pre and post-test values of the Global Pittsburgh Sleep Quality Index Score was compared using paired Student’s t test. P < 0.05 was considered to be statistically significant.

**RESULTS:**

The effect of Om chanting on the quality of sleep in the perimenopausal women was assessed by administering the Pittsburgh Sleep Quality Index (PSQI). The Global Pittsburgh sleep quality index score after the practice of Om chanting for 14 days was 4±1.8 which was significantly (P < 0.01) reduced compared to the PSQI score prior to Om chanting which was 8±1.2 as given in Figure 1. Thus, Om chanting was effective in improving the sleep quality in perimenopausal women as assessed by PSQI score.

**DISCUSSION:**

![Fig 1: Pre and Post intervention values of Global PSQI Score in Perimenopausal women](http://doi.org/10.36295/ASRO.2020.232366)
Yoga practice requires rigorous physical and mental self-discipline apart from dedication, time and effort. Regular practice of yoga increases the overall quality of one’s life. The COVID-19 lockdown is a stressful scenario for people of all ages, especially to perimenopausal women. Stress has a major effect on the physical and mental health as it influences the hypothalamus via the limbic system and causes changes in the heart rate variability. Practice of yoga is beneficial as its effects are mediated through the brain and autonomic nervous system and causes an impact on the adrenergic system. The significant improvement in the overall sleep quality score could be due to the effect of Om chanting on autonomic functions by alteration of vagal activity. Regular Om chanting reduces depression, anxiety, stress, calms and relaxes the mind completely thereby effectively improving the quality of sleep. Long term practice of Om chanting causes a significant increase in alpha EEG and galvanic skin response indicating relaxation and decrease in stress level inducing good quality sleep as observed in our study.

CONCLUSION:
Regular practice of Om chanting is effective in improving the quality of sleep in perimenopausal women. It is a simple and easy to follow procedure which can be recommended for regular practice among middle aged women to reduce the overall perimenopausal symptoms thereby improving the quality of life.

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Conflict of Interest - Nil.

REFERENCES: