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# A CLINICAL STUDY TO EVALUATE THE EFFECTIVENESS OF PRANAYAMAM FOR PREMENSTRUAL SYNDROME (PMS)

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#### **ABSTRACT**

Siddha system of medicine is a holistic approach to combat of lifestyle diseases and promotes the health in entire society. The life-style diseases could be corrected and prevented by following life style management practices such as Ashtanga Yogam, which are mentioned in "Theraiyar Pini Anuga Vidhi and proper diet. Pranayamam is the one of the important practice mentioned in Ashtanga Yogam. Prana means breath or life force, Yama means control; Pranayama means control of the breath, or life force. Premenstrual syndrome (PMS) is one of the commonest anxiety related life style disorder which is generally disturbs almost all the women in their fertile period. PMS upsets the both physical and psychological states of the females.

Usually the subsequent somatic and emotional symptoms are affects the women a weeks before their menstrual periods, such as acne, food cravings, Tenderness in breast, bloating/weight gain, headache, mild depression, anger, irritability, social withdrawal, poor concentration, sleep disturbance, mood swings and etc. PMS is usually at its worst during the seven days before the menstrual period starts and disappears once it begins. This study is evaluate the effectiveness of Pranayamam for Pre Menstrual Syndrome and promotes the healthy life style management of women-health via siddha system of medicine. And also create the awareness of life style disorders and its management to promote the healthy life. This study had conducted with ten unmarried Post Graduate Students aged between 25 to 27

years old who has with regular menstrual cycle for the last 6 months. The data were collected by the tools mentioned in DSM-IV. They were advised to practice Pranayamam regularly at early morning with empty stomach for last 7 days of the menstrual cycle. This study shown that practice of Pranayamam during Premenstrual period is considerably decreased the severity of the symptoms of premenstrual syndrome.

**KEYWORDS:** Siddha system of Medicine, Pre Menstrual Disorder, Pranayamam, Life style management.

#### INTRODUCTION

Siddha system is a holistic approach to combat diseases like Lifestyle disorders, other ailments and also to promote the health in the entire society. Siddha systems of Medicines are still accepted well by the Tamil community through the locally available resources. Life-style disorders could be easily prevented via Siddha medicine through adopting practices of proper Diet, *Ashtanga Yogam*, following method of "*Theraiyar Pini Anuga Vidhi Ozhukkam*", and *Kayakarpam*. Diet and lifestyle are the major factors found to influence susceptibility to many diseases. <sup>[1]</sup> Lifestyle diseases are associated with the fashion that people live their life. The main factors contributing to these disorders include bad food habits, lack of physical inactivity, wrong body posture, disturbed biological clock and also addictions such as drug abuse, tobacco smoking, alcohol consumption and these may leads to heart disease, stroke, obesity, type II diabetes and etc. Siddha medicine is claimed to revitalize and rejuvenate dysfunctional organs.

The golden words are taken from *Thirumanthiram* said that "There are no emotions without the body. The body wouldn't perish if it took in *karpam*". *Yogam* is a precious art that the Siddhars contributed to the Siddha system as it is one of the *kayakalpam* methods that preserve the physical and mental health.

Iyamam niyamamae ennila athanam Nayamuru prana yamampira thiyakaram Sayamigu thaaranai thiyanam samathi Ayamurum attanga maavathu maamae

Astanka Yogam comprises Iyamam, Niyamam, Asanam, Pranayamam, Prathyakaram, Tharanai, Thyanam and Samathi. Pranayamam is the perfect and scientific art of controlling

(Thirumanthiram)

one's breathing. It is also called vasi and vayu tharanai. [2] The breathing that goes on normally with regular rhythm and fixing the duration and amount of breathing differently as described by Siddhars. The fresh air (Oxygen) breathed in through the nostrils reaches the lungs and takes up carbon dioxide from the blood and expels it along with the expiratory air. The *Pranavayu* (oxygen) had taken up by the blood from the lungs and to reaches various tissues all over the body. This process of *Pranayamam* consists of three stages; 1. Pooragam/deep inspiration of the air (timing is 16 Mathirai), 2. Kumbagam/holding the inhaled air (timing is 64 Mathirai) and 3. Resagam/expulsion of the inhaled air (timing is 32 Mathirai). The ratio of three stages is 1:4:2. [2,5,6]

According to Siddha literatures, the human body is consist of nighty six *Thathuvas* such as Bhoothangal - 5, AAtharam - 6, Mandalam - 3, Porikal - 5, Naadi - 10 and etc. Naadi is classified in to 10 types among them first three are very essential, which are Edakalai, Pinkalai and Suzhimunai. Naadi which in turn have influence on three humours (Thadhu) namely as Vaatham, Pitham, and Kabham. Any defect of the human body is indicating through the tri *Naadi* (*Vatham*, *Pitham* and *Kabham*) which is called as mukkutram. <sup>[3,4]</sup> All of these mechanisms are controlled by the process of respiration. In Siddha system, breathing through the right nostril is called as *Pinkalai* (Suriya kalai), left nostril is Edakalai (Chandrakalai) and both nostrils are called as Suzhumunai. If a person taken 21,600 breathes a day on average, he could live for 120 years and breathe is faster pace, the life span may shorten. [3,4,5,6] The growth and development phase of a woman has changes in physical, mental and hormonal functions. In present situation influenced the changes of life style, food habits, family expectations, work place demands, postural disorders and etc to affects the women health. Mental stress is the greatest agonizing problem for women. Research has reported many gynaec functional changes such as Menarche, Menstruation, Pregnancy and Menopause and etc., are induced the mental stress and imbalances. Emotional tension leads to promote the physical problems. Premenstrual syndrome causes physical, mental, emotional and behavioural imbalance of female life especially in the menstrual cycle and also it is problem to causes impairment of quality in the women's life. Premenstrual syndrome (PMS) is a pscho-neuro-endocrine disorder of unknown aetiology. Many researches show that, all over the world around 90% of the women exposed to experience these symptoms during their premenstrual period. Several factors such as hormonal changes, diet, workloads and lifestyle may aggravate the condition. PMS involves a variety of physical, emotional and psychological symptoms experienced by women during the late luteal phase of menstrual

cycle (7-14 days prior to menstruation) and affects the daily life of menstruating women of any agers. The symptoms of PMS seem to worsen at seven days before menstruation and subside at the onset or after days of menstruation. The symptoms includes difficulty sleeping, tense feelings, irritability, clumsiness, mood swings, headache, cravings for sweet foods, cravings for salty foods, depression, angry feelings for no reason and etc.<sup>[7,8,9,10]</sup>

#### **AIM AND OBJECTIVES**

This study is to evaluate the effectiveness of Pranayamam (Breathing exercise) for Pre Menstrual Syndrome (PMS) and to generate awareness for PMS through life style management mentioned in Siddha system of medicine.

#### METHODS AND MATERIALS

This study had conducted with ten unmarried Post Graduate Students (PGs) aged between 25 to 27 years who has with regular menstrual cycle for last 6 months. Essential symptom of this syndrome is stress and anxiety, change of mood (feeling sad or crying all of a sudden), depressed mood, persistent anger or personal clashes, reduced interest in social relationships and work, feeling of immersion or being out of control, change in appetite (overeating or having little appetite), difficulty in sleeping (oversleeping or insomnia), lack of concentration, fatigue and lethargy, and physical symptoms (chest pain, abdominal pain, joint or muscle pain, frequent urination, weight gain. The data were collected by the standard Premenstrual Syndrome Questionnaire under the criteria guidelines of DSM IV (Diagnostic and Statistical Manual of Mental Disorder – IV which identifies PMS and emphasizes on mood disorders). The PGs were asked to determine the severity of PMS based on a questionnaire scale based on the severity, the grade was given 1 is mild, 2 is moderate and 3 is severe.

The PGs also had advised to perform *Pranayamam* regularly in the early morning with empty stomach after brushing the teeth and evacuating the bowels and bladder for last 7 days of the menstrual cycle. Method of *Pranayamam* described following as, sit on *Padmasanam* on a bed spread, Left hand is placed over the left knee in the position of *Sin mudirai* (great thumb tip and index finger tip touch and other three fingers extend), close the right nostril with the right thumb and left to do *Puragam* (inhalation of the air). Inhale the air for individual capacity and then close the left nostril with right ring finger and little finger. Retain the breath for 5 to 10 seconds (or the time needed to recite mentally 5 to 10 OUM'S) remove the right thumb finger from the right nostril, exhale the air slowly (*Resagam*) next to close the left

nostril and to do Puragam through the right nostril then close the both nostril hold the breathe for 5 to 10 seconds then do Resagam through the left nostril, the entire sequences forms one cycle of Pranayamam and relax for few minutes with normal breathing. Selected PGs were counselled to perform at least 5-10 cycles of Pranayama per day in the place of sufficient ventilation.

Further they guided that during performed Pranayamam days they should avoid some foods such spicy, salted and bitter tasted foods and recommended to drink more water. The data were collected by standard Premenstrual Syndrome Questionnaire and based on this the data were analysed.

#### **RESULTS**

This study shows that 5 (50%) PGs had age of 25, 2 (20%) PGs had age of 26 and rest 3 (30%) PGs had age 27.

Based on this study 02 (20%) PG's had mild score (below 42) and 8 (80%) PGs had moderate score (63-72) of PMS Questionnaire out of 84 total high score. 90% (9) PGs had Irritability, mood swing, fatigue and confusion. All the PGs (100%) had breast tenderness, pain radiating down thighs and acne in face. Few of them (20%) had diarrhoea and dizziness. After the intervention of the practices of *Pranayamam* during premenstrual period shown that 02 (20%) of PGs had below 20 of total score and rest 08 (80%) PGs had below 30 (29 – 26) of score out of total 84 PMS score. P value had shown 0.004.

#### DISCUSSION AND CONCLUSION

Pranayamam is regulates the breath, tranquilizes the mind, relaxes the muscles, and reduced the PMS. This study shown that it is promotes the quality of life and living is a constantly on going adjustment and adaptation process different levels of role demands physical, mental, social, and spiritual. It is the correct method of breathing for the restoration of good health and longevity of life. The present era, many women are involved in social, occupational, educational, familial issues and other responsibilities in their day to day life and easily adapt to change of life style. This may cause them to life style disorder like PMS. Since there is no permanent cure for premenstrual syndrome, methods for prevention or reduction of symptoms are the best ways to deal with this syndrome. The balance between the body and mind is regulated by Pranayamam. This study proves that the Pranayamam practice during premenstrual period is reduced the PMS.

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