



EFFECT OF YOGA ON PREMENSTRUAL SYNDROME AMONG STUDENTS MEENA.K, Msc NURSING , ASST.PROFESSOR, COLLEGE OF NURSING, THALASSERY.

ABSTRACT

Premenstrual syndrome is recurrent disorders that occur in the luteal phase of the menstrual cycle. It is characterized by intense physical, psychological, and behavioral changes that interrupt interpersonal relationship and disrupt the lives of affected women. The most common symptoms are depression, anxiety, tiredness, irritability, crying spells, confusion, social withdrawal, sleep disturbances, labile mood and tension¹. Nowadays yoga is a crucial component of the majority of treatment modalities. The yoga plays an important role for women who want to find effective relief against cramps and other related conditions. This will help to soothe nerves and keep mind calm as soon as the pain sets in. Breathing exercise helps in creating a bridge between mind and physical body and it should be easy for the body to stay relaxed as well. The purpose of the present study was to identify the effect of yoga on premenstrual syndrome among students.

Materials and Methods

The experimental study was conducted among 66 students in selected colleges in Thalassery, selected as a sample of convenience and purposive. The design used was pretest post test control group design. After pretest yoga was demonstrated to the experimental group (N=33) and allow them to practice yoga daily 1 hour for 2 weeks prior to next menstrual cycle. Post test were conducted among both experimental group

and control group by using rating scale. Analysis was done using mean, median, standard deviation, paired and independent 't' test.

Major Findings

The research shows that most [43.6%] of the students attained menarche at the age of 14 years, 35.45% attained at the age of 13 years and 21.03% attained menarche at the age of

12 years. Majority [85.6%] of the students has regular menstrual flow and 14.4% have irregular menstrual flow. Prevalence of premenstrual syndrome was checked among 195 students. All the sample 195[100%] had premenstrual syndrome. All [100%] have premenstrual syndrome, among that 129 [66.1%] belongs to mild and 66[33.8%] belongs to moderate.

Conclusion

The study finding concludes that yoga is effective for premenstrual syndrome among students.

Key words

Yoga, Premenstrual syndrome, students

INTRODUCTION

In majority of girls menstruation and premenstrual period results in mild physical psychological problems because of the changes in hormonal level and it develops intense including mood swings, tender breasts ,abdominal blotting, heaviness of the abdomen, nausea , vomiting, food cravings, fatigue, irritability and depression .An Estimated 3 of every 4 menstruating women experience some form of premenstrual syndrome. These problems tends to peak during the late 20s and early 30s².The America college of obstetricians and gynecologists estimated that at least 85% menstruating women have at least 1 premenstrual syndrome symptoms as part of their monthly cycle.

Relaxation therapies, including mind body and behavioral therapies such as exercise, relaxation breathing and stress

management have been tried for relief of PMS. Many alternative therapies such as massage, meditation, aroma therapy, reflexology, hypnotherapy, cranio-sacral therapy and yoga are also useful.

Alternative therapies are available to get relief from menstrual problems. Natural remedies which include exercise, diet, sound sleep and acupuncture³.

In the modern world interestingly, more and more woman are experiencing PMS. There are different yoga positions which will restore the flow of energy throughout the body and bring balance.

Pavanamuktasana or wind relieving position is helpful in relieve tension in abdominal organ and sexual organs.

Vipareethakarani, relive tension in entire back and sexual organs. It is helpful in digestion and elimination. Other positions are frog pose. It stretches the sciatic nerve complex and stimulates circulation⁴.

No successful advances have been made in the line management till today by the western medicine. Therefore, a complete, comprehensive and holistic approach is needed for the treatment of premenstrual syndrome. As a part of the study the investigator conducted a survey among several colleges at Thalassery and found that the PMS is a major problem which leads to school and college absenteeism. Students are not aware about the management of PMS. and they mainly choose the medical help without trying other remedial measures. In the modern world, varieties of alternative therapies are available and it soothes the physical and psychological well being of a person. While comparing with the medical

including hormonal therapies, the alternative therapies have less adverse effects and there benefits are more. Thus it is reasonable to investigate whether yoga can reduce the severity of PMS. The objectives of the present study were as follows

- Asses the prevalence of premenstrual syndrome among students.
- Asses the intensity of premenstrual syndrome.
- Evaluate the effect of yoga on premenstrual syndrome.
- Find the association between premenstrual syndrome and selected variables.

MATERIALS AND METHOD

The study used a experimental research approach with pre test post test control group design. Sampling was done in 2 phases. In phase 1 195 samples was selected using convenience sampling technique, among them 195 out of 195 having at least one premenstrual syndrome, depending upon the intensity of symptoms 66 samples. were selected for phase 2 using purposive sampling technique from college of nursing Thalassery and college of health science Thalassery. The inclusion criteria were students aged between 20-22 years, who attain the menarche and who willing to participate in the study. The ethical clearance was obtained and the period of data collection was from Feb 2014- Mar 2014. A detailed explanation of the study and nature participation was given to the students.

The demographic data were collected by using questionnaire, and the pretests were

conducted by using rating scale to assess the prevalence, intensity and severity of premenstrual syndrome. The rating scale consists of physical symptoms and psychological symptoms. The reliability of tool is done by Chronbach's alpha and the value got was 0.76.

After pretest yoga demonstrated to the students in experimental group and allows them to practice yoga daily one hour for 2 week prior to next menstruation cycle and reassessment was done after menstruation by using rating scale.

The pretest and post test scores of premenstrual symptoms were compared by using paired t test, and association between premenstrual syndrome and selected variables done by chi square test.

RESULTS

most (43.6%) of the students attained menarche at the age of 14 years, 35.4% attained at the age of 13 years and 21.03% attained menarche at the age of 12 years. Majority (85.6%) of the students has regular menstrual flow and 14.4% have irregular menstrual flow. Most (47.2%) of the students have 3-4 days cycle and 46.6% have 5-6 days cycle. Majority (83.5%) students have moderate flow.

The prevalence of premenstrual syndrome is presented in following pie diagram and it shows that 100% of the samples were having premenstrual syndrome.

Paired t test is done between pre test score post test score to find the effect of yoga on PMS. Chi square test was used the association between PMS has selected variables.

Table one shows comparison of pre test score of experimental and control group based on intensity of premenstrual syndrome. This data shows that calculated t value is less than the table value (2.00) significance at 0.05 level .So there is no difference between pretest score of experimental and control group. Table 2 shows comparison of pre test and post test score of experimental group and it shows that $t_{(32)}=2.04, p<0.05$. Calculated t value is (9.75) more than the table value 2.04 and it is statistically significant at 0.05 level. It concluded that there is significant difference in PMS after yoga therapy.

Table 3 shows comparison of post test score of experimental and control group. It shows that $t_{(64)}= 2.07, p<0.05$. Calculated t value is (13.59) more than table value(2.00) and is statistically significant at 0.05 level. So there is significant change in PMS among students after yoga therapy

DISCUSSION

The present study was made an attempt to evaluate the effect of yoga on premenstrual syndrome among students. The study was conducted in 66 students. The findings of the study shows that most (43.6%) of the students attained menarche at the age of 14 years, 35.4% attained at the age of 13 years and 21.03% attained menarche at the age of 12 years. This is consistent with the finding of survey conducted at Ethiopia in 2007,

where 83% of the adolescence attained their menarche at the age of 14 years⁵.

The present study showed that majority (85.6%) of the students has regular menstrual flow and 14.45 have irregular menstrual flow. Most (47.2%) of the students have 3-4 days cycle and 46.6% have 5-6 days cycle. Majority (83.5%) of the students have moderate flow and most(12.9%) have heavy menstrual flow. Majority (100%) of the sample have no habit of doing exercise. Majority (65.6%) of sample are having monthly income in the range of 5001-20000.

The present study showed that 1005 of students have PMS. The study findings were consistent with the findings of the study conducted in 2013 in Northern Ethiopia where out of the 100 sample, more than 68% of the subjects having PMS. The present study results are consistent with the findings of the study conducted in S.B.K.S Medical Institute and Research Centre, Gujarat, showed that 48% faced PMS regularly and 52% occasionally⁶.

The present study revealed that 66.1% belongs to mild and 33.8% belongs to moderate. The study findings were consistent with the findings of the study conducted in 2008 in Federal Territory of Kuala Lumpur, Malaysia, where out of the 100 sample, more than half (62%) belongs to mild, (30%) belongs to moderate and (10%) belongs to severe.

The study findings showed that there was significant reduction in the premenstrual syndrome of students after yoga practice ($t=9.75, p\text{-value}\leq 0.05$). this result is

consistent with the findings of the study which recommended that physical exercise helps to relieve PMS.

In the present study chi-square was computed to find the association of PMS and selected variables such as age at menarche, menstrual cycle, duration of menstruation, menstrual flow, exercise, food habit, and monthly income. Findings revealed that there is significant association between PMS and menstrual flow.

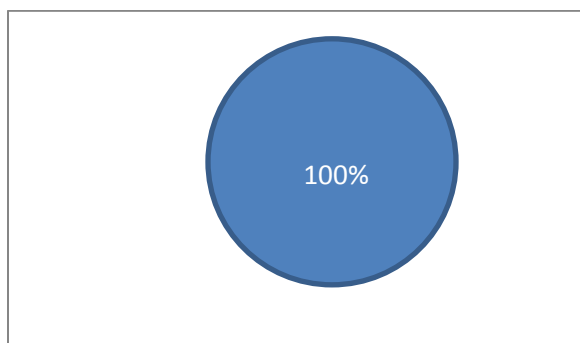


fig 1: Pie diagram showing prevalence of PMS.

Table 1: Comparison of pre test score of experimental and control group based on intensity of PMS.

	Mean	SD	df	T value
Experimental group	30.18	5.87		
			64	0.6
Control group	27.3	4.94		

Table 2: Comparison of pre test and post test score of experimental group.

	Mean	SD	df	t value	P value
Pre test	30.18	5.87			
			32	9.75	<0.001
Post test	17.15	6.22			

Table 3: Comparison of post test score of experimental and control group.

	Mean	SD	df	t value	P value
Experimental group	17.15	6.22			
			64	13.59	<0.001
Control group	28.75	4.19			

CONCLUSION

Based on the findings of the study, it can be concluded that yoga can cause a significant reduction in premenstrual syndrome.

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