

## **Effects of Yogatherapy on Menstrual Disorders in Paramedical Hostel Students**

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### **Abstract**

The present study entitled “**effects of yogatherapy on menstrual disorders in paramedical hostel students**”. For this purpose, 38 girls who were suffering from menstrual disorders selected from NISH/NIPT Hostel, Nitte University, Deralakatte Mangalore for 35 days programme from 22<sup>nd</sup> February to 30<sup>th</sup> March 2016. They were randomly divided equally into an experimental group and control group. Yogic practices were progressively introduced to the experimental group on daily one hour from 6.30am to 7.30am. The control group was not exposed to any yogic practices. Both the groups underwent BMI, BP, and Weight measurement, at baseline at 35 days. A questionnaire was also administered to both the groups at baseline and at 35 days.

The results of various tests were analyzed through student’s paired ‘t’ test and have been compared for the two groups. After Yoga Therapy, the experimental groups showed a significant improvement in the parameters are concerned at a level of significance  $p < 0.05$ . There is no significant change in Control group. This depicts that the regular practice of the selected yogic techniques helped in managing menstrual disorder.

**Keywords :** Menstrual disorder, Yogic therapy, Questionnaire, Rajodharana, Dysmenorrhea.

### **Introduction**

The wealth of a nation and health of the future generation depend upon the physical and mental well-being of women. It is because; nature has endowed her with the responsibility of perpetuating mankind. Regularly of menstrual cycle in any women depends on a lot of internal and external factors effecting the mind and body. Many a times, due to several factors the menstrual process may be absent excessive, irregular or may cause discomfort and severe pain. It is then considered to be disorder in menstruation.

The common menstrual complains include irregularity, excess flow and physical symptoms. Menstrual disorder and their adverse symptoms represent an important health issue for women of much child-

bearing age. Aside from a deleterious effect on the individual’s private life, menstrual disorders are being increasingly recognized as having significant implications at work.

The yogic practices concentrates on the purification of body and mind and trough this integrated holistic approach one can overcome several kinds of afflictions in life. Yoga can make her emotionally stable and make her free from psychological disturbances. Therefore this study was done to test the effectiveness of yogic practices in the management of menstrual disorder.

### **Literature Review:**

Classical texts are the main source which gives the knowledge about yoga. The

concept of health, disease, life-style and diet are explained in these texts. Maharshi Patanjali defines yoga as 'yogahcittavrttinirodhah'. i.e by the practice of yoga one can restrain the mental modifications. Various therapeutical aspects are explained in his yoga sūtras.

Neelam Tejwani Et al (2015) studied the effects of yoga in menstrual disorders and stated that yoga programme containing asanas, pranayama, relaxation and concentration techniques is formulated for treatment and prevention of gynaec issues.

Shanthi P (2015) studied a single case study on menstrual disorders with yoga therapy. She concluded that by the practice of yoga, subjects feel comfortable during menstruation, pregnancy and menopausal period.

Logeshwari K. Et al (2014) studied the effect of yoga therapy on menstrual disorders with reference to hormonal discrepancy and shown significant improvement in estradiol test and depicts that yogic practices are helpful in managing menstrual disorder.

### **Hypotheses**

It was hypothesized that, as a result of yogic practice-

There is significant difference between pre and post tests BMI, WEIGHT and BP.

There is significant difference between pre and post Questionnaire points.

### **Objective of the study**

To study the effects of yogic practices on menstrual disorders of young girls of the age group of 17-25 years.

### **Materials and Methods**

The present study was conducted to assess the effects of yogic practices among young

girls who were suffering from menstrual disorders.

The study was undertaken at NISH/NIPT Hostel, Nitte University, Deralakatte. All the subjects of the study were of the age group of 17 to 25 years. All the subjects were unmarried. The study was conducted for the period of 35 days from 22<sup>nd</sup> February to 30<sup>th</sup> March. The practices were taught daily morning 6.30am to 7.30am.

### **Method of study:**

There were 38 volunteers who were suffering from menstrual disorders and are willing to undergo yoga therapy programme. A detailed case history of each subjects was taken which are given in detail under Appendix. The subjects were randomly divided into two groups- experimental group and control group, each group containing 19 subjects.

The control group not exposed to any yogic practices. Yoga was introduced to the experimental group, which contained a set of 27 practices- asanas, pranayamas, and relaxation techniques in a proper sequence. Asanas were taught for a period of 30 minutes, Pranayamas for 15 minutes and relaxation for 10 minutes. All the practices were taught gradually. Sufficient rest was given in between the practice wherever needed.

### **Parameters**

The parameters used are as follows:

**1. Blood Pressure:** Blood pressure of all subjects was measured using sphygmomanometer.

**2. Weight:** Weight was measured pre and post the practice of yoga, using the measuring scale.

**3. Body Mass Index:** Body Mass Index (BMI) was calculated by using digital weighing machine, pre and post test.

**4. Questionnaire:** The subjects were asked to answer a questionnaire both before and after the practice of yoga. A questionnaire with 50 questions was prepared for the purpose of study by

considering the various signs and symptoms of menstrual disorders. It contained questions about their present menstrual pattern and general health condition. The questionnaire was of closed form and each question contained answers in the form of choice in accordance with the questions. The subjects were asked to answer the questionnaire in an honest manner by choosing the most suitable answer. There were for answers for each question which were rated from 0 to 3 points.

**Yogic practices:**

The following yogic practices taught to experimental group for a period of 35 days. Swastikasana, Vajrasana, SuptaVajrasana, Simhasana, Tadasana I&II, Trikonasana, Parsvakonasana, Paschimottanasana, Purvottanasana, Janushirsana, Mahamudra, Pavanamuktasana, Bhujangasana, Salabasana, Dhanurasana, Bh aradwajasana, Baddhakonasana, Upavistakonasana, Viparitararani, Uttanapadasana, Ujjayee pranayama, Anuloma Viloma pranayama, Bhastrika pranayama, Bahyakumbhaka and Shavasana I & II.

**Observation**

After the practice of yoga for a period of 35 days, the members of experimental

group experienced overall improvement in their health. The yogic practices made them get relived of their menstrual irregularities. All the subjects of the study underwent the pre and post the practice of yoga. The experimental group showed considerable improvement in the weight, BMI and blood pressure which are shown in tables numbering. There were no much considerable changes in control group in this regarding. The following tables show the results of various parameters for both experimental and control group, before and after the practice yoga.

**Results:**

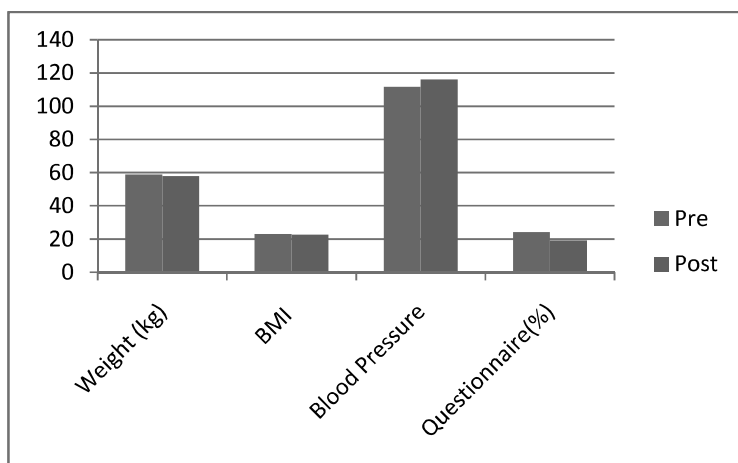
The result of the study shows yogic therapy helpful to management the menstrual disorders. In this study shows the All the subjects under study were tested before and after 35 days of yoga training which consisted of 60 minutes of practice in a day. The final result shows an overall reduce menstrual disorders like, the painful menses, sleeplessness, and heavy bleeding and pre menstrual symptoms. Pain is reduced in almost all the subjects of experimental group. Experiment group pre and post tests of Weight, BIM, BP, and Questionnaire level result statistically significant (p<0.05). In control group no significant changes.

**Statistical analysis of Experimental Group and Control Group**

**Experimental Group Statistical Analysis**

Sl. No	Parameter	MEAN±SD		t Value	P Value	Sig.
		Pre	Post			
1	Weight(kg)	58.9473±10.4906	57.8947±6.1523	0.3173	0.02656	S
2	BMI	23.1210±0.8888	22.6210±3.5124	2.8058	0.0116	S
3	BloodPressure(mmHg)	111.6667±1.4010	116.2222±0.831	-3.0545	0.0085	S
4	Questionnaire (%)	24.16±0.1040	19.17±0.1104	3.6308	0.0019	S

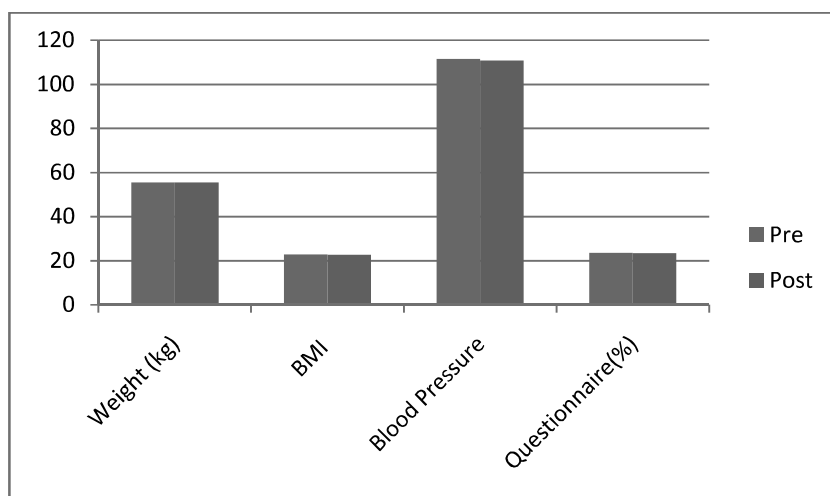
**Graphical representation of experimental group:**



**Control Group Statistical Analysis**

Sl. No.	Parameter	MEAN ± SD		t Value	P Value	Sig.
		Pre	Post			
1	Weight	55.5789±1.423	55.3684±1.445	1.4552	0.1628	NS
2	BMI	22.7437±0.827	22.6631±0.847	1.7142	0.1036	NS
3	Blood Pressure (mmHg)	111.4737±1.782	110.8421±7.581	0.4451	0.6615	NS
4	Questionnaire (%)	23.55%±0.0159	23.43%±0.013	0.2810	0.7819	NS

**Graphical representation of control group:**



**Discussion**

Every member felt improvement after the yoga therapy sessions. All subjects are interested in practicing selected practices daily. Got severe painful menses with heavy bleeding and abdominal pain during

menses, after beginning of practice pain reduced gradually. Muscles cramps in the legs which reduced the after practice. Severe backache, headache during menses which reducing after practice. Got vomiting with giddiness which reduced slowly in

the next menstrual cycle. Before practice some of were suffering hungrylessness and sleeplessness during menses was reduced the after practice yoga.

Subjects reported that they experienced freshness, relaxation and calmness after the practices. Except menstruation time 15 members out of 19 attends the classes regularly. It showed various other positive effects such as reduced stress, improved concentration and positive thinking ability after the few days of practices. After the practice all subjects are fill freshness and calmness. One subject is suffering from severe pain in stomach, back and right side of the whole body, after the practice

reduce her complete pain. In observing result significant difference in pre and post tests.

#### **Conclusion:**

The present study reveals that yoga therapy helps efficiently in managing the menstrual disorders and in reducing the symptoms with the minimal effort. In spite of the fact that the therapy was given only for a short duration and there was no much control over the diet, the results are encouraging. The yoga therapy would yield more result if it is carried out for longer duration. Therefore it can be concluded that yoga therapy is fruitful in controlling menstrual disorders.

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