

# Effect of Selected Yogic Practices on Menstrual Disorders in High School Girls

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**Abstract** – The present study is entitled ‘A Study on the effect of yoga therapy on menstrual disorder in High School Girls’. For this 28 girls who are suffering from menstrual disorder were selected from 9th standard student’s Vishwamangala English Medium School, Konaje. The study was of the duration of 30 days. They were randomly divided into an experimental group and a control group. Yogic practices were progressively introduced to the experimental group on six days in a week for one hour from 3 to 4 pm. The control group was not given any yogic practices. Both the group underwent B.P, height, weight, and BMI measurements at baseline, at 15 days and at 30 days. A set of questionnaire was also administered to both group at the baseline and at 30 days. The results of various tests were analyzed using students t test. After the yoga therapy every variable this study depicts that yogic practices are helpful in managing menstrual disorders.

**Keywords:** Yogic Practices, Menstrual Disorder

## I. INTRODUCTION

Good health is one of the greatest resources for vitality, creativity and wealth. Health is not a static state-it is dynamic ever changing. We can never claim that we are always healthy but only that we are healthy at a particular moment. Health is like a live wire. At the moment we feel it, the sensation is energizing, the absence it is a state when the body and mind are dull and slow. Disease exists when health does not. Good health results from right diet, adequate exercise and a mind which is stress free. The dramatic changes in our life style, sedentary way of working, wrong dietary habits, lack of exercise, smoking and alcoholism lead to many psychological and psychosomatic disorders. A menstrual disorder is a physical or emotional problem that

interferes with the normal menstrual cycle, causing pain, unusually heavy or light bleeding, delayed menarche, or missed periods. Typically, a woman of childbearing age should menstruate every 28 days or so unless she is pregnant or moving into menopause. But numerous things can go wrong with the normal menstrual cycle, some the result of physical causes, others emotional. These include amenorrhea or the cessation of menstruation, menorrhagia or heavy bleeding, and dysmenorrhea or severe menstrual cramps. Nearly every woman will experience one or more of these menstrual irregularities at some time in her life.

## II. REVIEW OF LITERATURE

Wilson (2002) conducted a study to assess the prevalence of menstrual disorder among adolescents of 14-16 years in Switzerland using questionnaire. Among 327 cases, 185 cases (56.6%) reported menstrual disorder. Among them 95 (31.7%) had mild menstrual disorder, 45(15%) had moderate menstrual disorder and 17 (5.7%) had severe menstrual disorder.

Martin *et al* (2001) conducted a study to assess the prevalence and severity of menstrual disorder among adolescents. A 95-item menstrual Assessment Form was administered to 207 suburban-based adolescent females in Turkey. Subjects had a mean age of 17.6 years, 89% were white, 59% were in high school, and 28% were in college. Almost all subjects reported menstrual disorder (96%) or moderate (89%) severity; while many reported changes they considered severe (59%) or extreme (43%). The most commonly reported changes in physical condition were general discomfort, water retention symptoms, fatigue, and autonomic physical changes. The most commonly reported

changes in mood and behavior included impaired social function, depressive changes, and impulsive behavior. These changes were most severe in those adolescents who reported having menstrual disorder.

### III. METHODOLOGY

There were 28 girls who were suffering from menstrual problems and are willing to undergo Yoga therapy programme. A detailed case history of each subject was taken. The subjects were divided in to two groups, experimental containing 15 and control group 13 students in experimental and control group respectively. The control group was not exposed to any Yogic practices. Yoga was introduced to the experimental group, which contained a set of 22 Yogic practices which included *Asana*, *Pranayama* and relaxation techniques in a proper sequence everyday from 3 to 4 pm. All the practices were taught gradually and

sufficient rest was given in between the practices wherever needed.

*The practices which have given are as follows:*

*svastikasana, vajrasana, supta vajrasana, tadasana, trikonasana, parswakonasana, paschimottanasana, purvottanasana, pavanamuktasana, bhujangasana, shalabasana, dhanurasana, janusirshasana, upavista konasana, baddakonasana, viparitarakani, uttanapadasana, ujjayi, anuloma-viloma, bhastrika, savasana, yoganidra*

### IV. RESULTS

The result of the study shows significant effect of yoga on menstrual disorders. The value of the t-test for questionnaire is significant at 0.0002363 level of significance. The result of the study are shown as follows.

TABLE I THE RESULT OF EXPERIMENTAL GROUP

Sl. No.	Parameters	Mean		S.D		“t” value	“p”value	Sig.
		Pre	Post	Pre	Post			
1	Questionnaire	7.933333	5.4	2.91465	3.04255	4.8316	0.0002	S
2	Systolic B.P	115.2	115.466	7.05894	7.05769	0.1048	0.918	NS
3	Diastolic B.P	68.04	68.5333	8.72435	11.0186	0.0359	0.9718	NS
4	Weight	50.2333	50.32	10.5698	9.09006	0.1015	0.9206	NS
5	Water	21.84	46.6	25.5518	19.7946	2.0813	0.0825	NS
6	Fat	13.42	18.92	15.8214	11.3956	1.4605	0.1946	NS
7	BMI	20.45533	20.6193	3.96471	4.09670	0.2514	0.8052	NS

S – Significant; NS – Non-significant.

TABLE II THE RESULT OF CONTROL GROUP

Sl. No.	Parameters	Mean		S.D		“t” value	“p” value	Sig.
		Pre	Post	Pre	Post			
1	Questionnaire	3.84615	3.923077	1.77229	2.005998	0.2673	0.7938	NS
2	Systolic B.P	113.846	114.9231	6.50443	6.613894	0.5297	0.606	NS
3	Diastolic B.P	68.7692	69.38462	9.95116	9.429903	0.2294	0.8225	NS
4	Weight	42.9923	43.37692	10.0467	9.828713	1.5088	0.1572	NS
5	Water	20.5307	22.29231	27.6941	25.35976	7.7	0.08222	NS
6	Fat	5.06153	7.315385	8.49671	11.19441	1.4074	0.2321	NS
7	BMI	19.8492	18.04308	7.46504	3.041607	0.9528	0.3595	NS

S – Significant; NS – Non-significant.

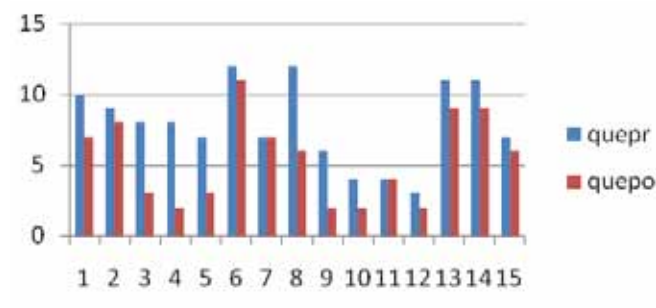


Fig.1 Experimental group-Questionnaire

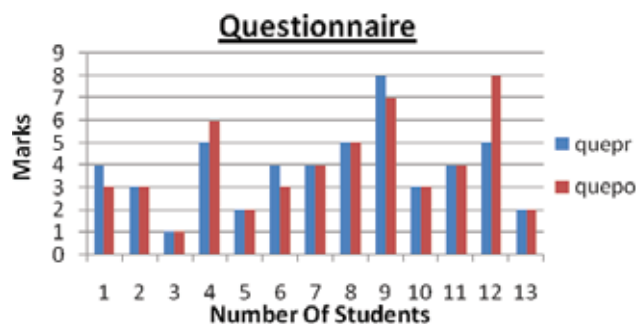


Fig.2 Control group-Questionnaire

## V. DISCUSSION

In the present study, the result of experimental group were proved to be statistically significant, whereas in control group there was no significant result. Every member felt improvement after the yoga therapy programme.

The statistical analysis of the result shows that, there is a significant changes in the answers of the questionnaire at  $p=0.0002363$ , level of significance being  $p \leq 0.05$ .

As per the effect of yoga on menstrual disorder results of the patients before and after the practice, it is known that there is notable reduction in pain during the period of menstrual cycle.

Reduction in weight is also seen in 5 members of the experimental group, one of the subjects in experimental group who is suffering from headache during the time of menstruation was found better result after the practice of yoga.

It is evident from the above results that all the 15 subjects responded to the treatment positively, but the variation of the rate of success could be dependent upon the regularity of practice, life style and attitude.

Thus the study clearly shows that yoga therapy is helpful to overcome painful menstruation.

## VI. CONCLUSION

From the above study one can say all the 15 patient have responded to the treatment. All subjects have shown good response. So one can say that yogic practice has a great role to play in reliving in menstrual disorder which is evident

from 15 students whom we have been able to treat. However further study in this regard is needed to fully these findings. Therefore it can be concluded that yoga therapy is helpful in controlling menstrual disorder.

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