

A Study to Assess the Effectiveness of Jacobson Progressive Muscle Relaxation Exercise on Premenstrual Syndrome Among Adolescent Girls in Selected Higher Secondary School, Silvassa, Dadra Nagar Haveli

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ABSTRACT:

INTRODUCTION: Women are smart and savvy. Striving to live up to their potentials, they are curious about the world they live in and want to make a difference. But adolescent is a period they struggle with the issues of menstruation.

OBJECTIVE: To evaluate the effectiveness of Jacobson Progressive Muscle Relaxation Exercise on Premenstrual Syndrome among adolescent girls.

DESIGN: A quantitative approach using quasi experimental pre-test post-test design with control group.

PARTICIPANTS: 100 adolescent girls with moderate to severe premenstrual syndrome was selected using Non probability purposive sampling technique in Government Higher Secondary School at Silvassa.

INTERVENTION: Jacobson Progressive Muscle Relaxation Exercise was given for a period of 15-20 minutes once a day for 28 days.

TOOL: self administered modified Stainer and Wilkins PMS diagnostic criteria were used to assess the level of PMS.

RESULTS: Analysis using Paired 't' test found significant.

CONCLUSION: The findings of the study revealed that Jacobson Progressive Muscle Relaxation Exercise helps in decreasing premenstrual syndrome among adolescent girls.

Keywords: Jacobson Muscle Relaxation Excersicess, Premenstrual Syndrome

INTRODUCTION:

Menstruation is a normal physiological cycle common to all females in the reproductive age group. The initiation of menstruation takes place during the early adolescence period. Nearly all women of child bearing age have some premenstrual symptoms, but those between their late 16s and early 40s are most likely to experience Premenstrual syndrome (PMS).

The term Premenstrual syndrome was first coined by Greene and Dalton in 1953. It has been defined as “the cyclic recurrence in the luteal phase of the menstrual cycle of a combination of distressing physical, psychological, and behavioural changes of sufficient severity to result in deterioration of interpersonal relationships and or interference with normal activities.

The physical symptoms of premenstrual syndrome includes breast engorgement, breast tenderness, abdominal bloating, constipation or diarrhea, acne, headache, fluid retention, weight gain, clumsiness, nausea and vomiting, heart palpitation, appetite change, fatigue, muscle aches. The psychological and behavioural symptoms of premenstrual syndrome are depression, anxiety, panic attack, insomnia, irritability, outbursts of anger, hostility, food craving (salt and sugar), mood swings, inability to concentrate, memory loss, withdrawal from other people, confusion, lethargy and fatigue.

These symptoms are present during the last week of the luteal phase and remit within the first few days of menses and are absent during the week following menses. Women may begin to experience premenstrual syndrome symptoms at any time during their reproductive years.

STATEMENT OF THE PROBLEM

“A STUDY TO ASSESS THE EFFECTIVENESS OF JACOBSON PROGRESSIVE MUSCLE RELAXATION EXERCISE ON PREMENSTRUAL SYNDROME AMONG ADOLESCENT GIRLS IN SELECTED HIGHER SECONDARY SCHOOL, SILVASSA, DADRA NAGAR HAVELI.”

OBJECTIVES

1. To assess the pretest and posttest level of premenstrual syndrome among adolescent girls in control and experimental group.
2. To determine the effectiveness of Jacobson muscle relaxation therapy on premenstrual syndrome among adolescent girls in experimental group.
3. To find out the association between the level of premenstrual syndrome among adolescent girls with the selected demographic variables in control and experimental group.

HYPOTHESES

- **H1:** The mean posttest score of premenstrual syndrome is significantly lesser than the mean pretest score of premenstrual syndrome among adolescent girls in experimental group.
- **H2:** The mean posttest score of premenstrual syndrome is significantly lesser in experimental group than the mean posttest score of premenstrual syndrome among adolescent girls in control and experimental group.
- **H3:** There is a significant association between the level of premenstrual syndrome with the selected demographic variables in control and experimental group.

ASSUMPTIONS

- Majority of the adolescent girls who attained menarche have premenstrual syndrome.
- It is possible to relieve the premenstrual syndrome by Jacobson muscle relaxation Exercise.

METHODOLOGY

RESEARCH APPROACH	Quantitative Research Approach
RESEARCH DESIGN	Experimental Research design

	(quasi experimental pre test post test design with control group)
DATA COLLECTION AREA	Selected higher secondary school ,DNH,Silvassa
TARGET POPULATION	Adolescent girls with Premenstrual syndrome
SAMPLE SIZE	14-17 years girls from selected HigherSecondary School, DNH, silvassa.
SAMPLING TECHNIQUE	Non probability purposive sampling technique

DATA ANALYSIS AND INTERPRETATION

Section –I: Frequency and Percentage wise distribution of samples based on their demographic variables.

Section-II: Pretest Posttest means score of premenstrual syndrome in control and experimental group.

INCLUSION CRITERIA	Adolescent girls with Moderate to severe degree of pre menstrual syndrome. Adolescent girls are studying 9 th , 10 th , 11 th &12 th . Adolescent girls are free from complications such as menorrhagia , oligomenorrhoea, fibroid cramping, etc. Understand or speak both English and Gujarati those adolescent school girls who are willing to participate. those adolescent school girls are present during the period of data collection.
EXCUSION CRITERIA	Girls with Mild degree of premenstrual syndrome. Girls have any other medical disorders such as thyroidism , leukemia, endocrine disorders etc., psychiatric illness like major depression, phobic disorders , psychotic disorders etc., and gynecological problems like puberty menorrhagia , polycystic ovarian syndrome, androgen excess disorders etc. Girls are taking selective serotonin reuptake inhibitors, hormonal birth control medicine, warfarin etc. Girls are regularly doing exercise or yoga.
<u>VARIABLE:</u> DEPENDENT VARIABLE INDEPENDENT VARIABLE	<ul style="list-style-type: none"> ➤ Premenstrual syndrome ➤ Jacobson Progressive Muscle Relaxation Exercise
DATA COLLECTION TOOL SECTION-I SECTION – II	<ul style="list-style-type: none"> ▪ Socio- demographic variables ▪ Premenstrual syndrome scale(PMSS)

Section-III:

- Distribution of samples based on level of premenstrual syndrome in control and experimental group.
- Comparison of posttest mean scores of premenstrual syndrome between the control and experimental group.

Section – IV:

- Association between pretest levels of premenstrual syndrome in control group and demographic variables.
- Association between pretest levels of premenstrual syndrome in Experimental group and demographic variables.

SECTION – I

Table-4.1.1: Frequency and percentage wise distribution of samples based on the demographic variables in control and experimental group. (n=100)

Demographic Variables	Experimental Group		Control Group	
	Frequency	Percent	Frequency	Percent
1.Standard				
a. 9 th std	0	0.00	0	0.00
b. 10 th std	21	42.00	24	48.00
c. 11 th std	27	54.00	24	48.00
d. 12 th std	2	4.00	2	4.00
2.Religion				
a. Hindu	48	96.00	45	90.00
b. Muslim	2	4.00	5	10.00
c. Christian	0	0.00	0	0.00
d. Others	0	0.00	0	0.00
3. Type of family				
a. Nuclear family	44	88.00	45	90.00
b. Joint family	6	12.00	5	10.00
c. Extended family	0	0.00	0	0.00
d. Other	0	0.00	0	0.00
4. Type of residence				
a. Urban	43	86.00	42	84.00
b. Rural	7	14.00	8	16.00
5.Diet				
a. Vegetarian	28	56.00	24	48.00
b. Non vegetarian	22	44.00	26	52.00
6.Weight (in kg)				
a. Below 30 kg	0	0.00	0	0.00
b. 31-35 kg	1	2.00	1	2.00
c. 36-40 kg	12	24.00	12	24.00
d. 41-45 kg	22	44.00	21	42.00
e. 46-50 kg	5	10.00	6	12.00
f. Above 50kg	10	20.00	10	20.00
7. Educational status of the mother				
a. Professional degree	0	0.00	0	0.00
b. Graduate or postgraduate	3	6.00	2	4.00

c. Intermediate or post high school diploma	0	0.00	0	0.00
d. High school certificate	0	0.00	0	0.00
e. Middle school certificate	35	70.00	31	62.00
f. Primary school certificate	7	14.00	10	20.00
g. Illiterate	5	10.00	7	14.00
8.when you attained menarche				
a. <12 years	4	8.00	5	10.00
b. ≥ 12 years	46	92.00	45	90.00
9. Frequency of menstrual cycle				
a. 26-28 days	28	56.00	32	64.00
b. 29-31 days	9	18.00	10	20.00
c. 32-34 days	7	14.00	6	12.00
d. Above 35 days	6	12.00	2	4.00
10. How many days you have menstrual flow				
a. 2-4 days	16	32.00	20	40.00
b. 5-7 days	34	68.00	30	60.00
c. 8-10 days	0	0.00	0	0.00
11.Family history of premenstrual syndrome				
a. Present	32	64.00	34	68.00
b. Absent	18	36.00	16	32.00
12.How many days you have premenstrual syndrome				
a. 1-3 Days	6	12.00	5	10.00
b. 4-6 days	40	80.00	40	80.00
c. 7-10 days	2	4.00	3	6.00
d. >10 days	2	4.00	2	4.00

SECTION - II

Table-2.1 : Posttest means score of premenstrual syndrome in control and experimental group.

(N=100)

Premenstrual syndrome	Max score	Control -post test scores			Experimental post test score		
		Mean	SD	Mean%	Mean	SD	Mean%
Physical	55	30.74	6.83	5.89	19.32	2.49	35.13
Psychological	45	26.56	7.11	59.02	15.72	3.32	34.93
Behavioral	45	27.12	6.42	60.27	15.32	2.04	34.04
Psychosocial	30	18.76	4.98	62.53	10.2	1.68	34.00
Overall	175	103.18	25.35	58.96	60.56	9.53	34.60

SECTION - III

Table-:3.1 Distribution of samples based on level of premenstrual syndrome in control and experimental group.

(N=100)

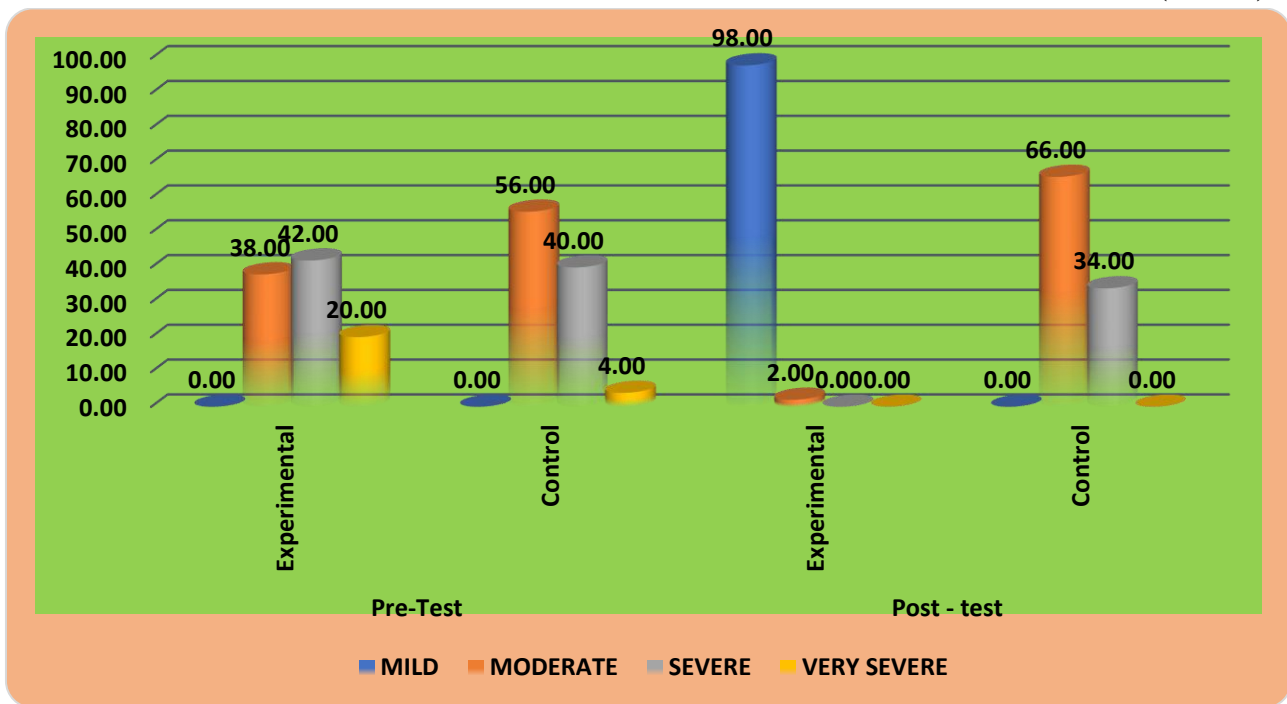


Table – 3.2 : comparison of pre test and post test mean score of premenstrual syndrome in control group. (n=50)

Group	Pre test		Post test		Mean difference	“t” value	P value
	Mean	SD	Mean	SD			
Control Group	102.24	20.73	103.18	25.35	0.94	0.775	0.442

Table – 3.3 : comparison of pre test and post test mean score of premenstrual syndrome in experimental group. (n=50)

Group	Pre test		Post test		Mean Difference	“t” value	P value
	Mean	SD	Mean	SD			
experimental group	118.5	29.35	60.56	9.53	57.94	15.02	≤0.001***

P<0.001*** – Highly significant

Table –3.4: Comparison of post test means score of premenstrual syndrome betweenThe control and experimental group. (n = 100)

Control group post test		Experimental group post test		Mean Difference	“t” value	P value
Mean	SD	Mean	SD			
				42.62	14.421	P<0.001***

103.18	25.35	60.56	9.53			
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P<0.001*** – Highly significant

SECTION- IV

Table- 4.1: Association between pretest levels of premenstrual syndrome incontrol group and demographic variables. (n=50)

conveys the association between pretest levels of premenstrual syndrome in control group and demographic variables. The above findings concludes that there is an association between pretest level of premenstrual syndrome in control group with the selected demographic variables such as religion and age at menarche. Hence, the researcher accepts the research hypothesis (H3).

Table-4.2: Association between pretest levels of premenstrual syndrome in experimental group and demographic variables. (n=50)

conveys the association between pretest levels of premenstrual syndrome in experimental group and demographic variables. The above findings concludes that there is an association between pretest means score of premenstrual syndrome in experimental group with the selected demographic variables such as Education status of the mother . Hence, the researcher accepts the research hypothesis (H3).

DISCUSSION:

- Most of the adolescent girls have moderate, severe and very severe level of premenstrual syndrome.
- After the practice of Jacobson muscle relaxation exercise , level of premenstrual syndrome has decreased significantly in experimental group.
- The findings indicate that, Jacobson muscle relaxation excercise can be administered to the school going adolescent girls in reducing the level of premenstrual syndrome since it is affordable, comfortable and effective without any side effects.
- After the completion of the study, subjects in control group were taught about the Jacobson muscle relaxation excercise.

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