

# EFFECTIVENESS OF ACUPRESSURE ON RELIEF OF DYSMENORRHOEA AMONG ADOLESCENT GIRLS (12-18) IN GURUGRAM, HARYANA.

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## ABSTRACT

**Introduction:** Dysmenorrhea is the occurrence of painful cramps during menstruation. More than half of all girls and women suffer from dysmenorrhea (cramps), a dull or throbbing pain that usually centers in the lower mid-abdomen, radiating toward the lower back or thighs. Acupressure is one of the most popular alternative modality which is been practiced worldwide presently. Activating “The Acupoint Sp6 or San Yin Jiao or Spleen 6” point by pressing and releasing every day as a preventive measure for reducing the problems like premenstrual syndrome, dysmenorrhea, irregular menstruation. Dysmenorrhea among adolescent girls may be managed using acupressure which is a non-invasive, cost-free, and timely way to manage their own discomfort. In India 67.2% adolescent girls suffer from dysmenorrhea and 60% of them have disrupted daily routines.

**Objective:** The objective of this study is to assess the effectiveness of acupressure to relief of dysmenorrhea among adolescent girls in a selected schools Gurugram, Haryana. **Methods:** In this study quantitative research approach was adopted. The research design used in this study was the true experimental design, “Two group pretest, posttest design” was used for assessing the effectiveness of acupressure to reduce the dysmenorrhea among adolescent girls. Probability, “Flip a coin method” sampling technique was used for the selection of the samples. Total 60 adolescent girls with dysmenorrhea, 30 in experimental and 30 in control group were selected for the research study, in Govt. Girls. Sr. Sec. School Jacobpura, Gurugram, Haryana. Tool was consisting of demographic data of adolescent girls and standardized numerical pain rating scale. **Results:** Before intervention, mean score in experimental group was 5.40 and in control group 4.93. After intervention, mean score in experimental group was 2.50 and in control group was 5.00. Calculated unpaired “t” test value After intervention 4.846 was found to be more than the table value. Calculated paired “t” test value After intervention 15.967 was found to be more than the table value. This data to had indicated that there was significant reduction of pain score in experimental group. In control group, there is no significance difference between pretest and posttest pain score ( $t= 1.439$  at  $p<0.05$ ). There is no significance association between the level of scores and other demographic variables except onset of pain ( $6.662 > 5.991$ ). **Conclusion:** The findings of the present study suggest that the non-pharmacological method of pain relief dysmenorrhea measure like acupressure at Sp6 is an effective way to reduce dysmenorrhea.

**Key words:** Acupressure; Dysmenorrhea; Adolescent girls.

## INTRODUCTION:

The female reproductive system is designed to carry out several functions. Towards the end of puberty, girls begin to release eggs as part of a monthly period called the female reproductive cycle, or menstrual cycle (menstrual referring to “monthly”) Approximately, every 28 days, during ovulation, an ovary sends a tiny egg into one of the fallopian tubes. Unless the egg is fertilized by a sperm while in the fallopian in the two to three days following ovulation, the egg dries up and leaves the body about two weeks later through the vagina. This process is called menstruation. Blood and tissues from the inner lining of the uterus (the endometrial) combine

to form the menstrual flow, which generally lasts from four to seven days. The first period is called menarche.<sup>2</sup>

Adolescent period is a special period in the life of women. It is a time of moving from the immature childhood into the maturity of adulthood. Adolescent period is characterized by marked physiological changes, development of sexual characteristics, efforts toward the construction of identity. Menarche is the onset of menstruation and it is one of the most significant milestones in a woman's life. The mean age at menarche varies from population to population and is influenced by nutritional status, geographical location, environmental conditions and socioeconomic status.<sup>3</sup>

For the first few years after menarche, irregular and longer cycles are common. Dysmenorrhea refers to the painful menstrual cramps of uterine origin. It is considered as a common complaint among adolescent girls. Dysmenorrhea is the main cause for school and work absenteeism among adolescent girls.<sup>4</sup>

Acupressure is an alternative form of acupuncture in which physical pressure is applied to the same energy points and channels that are used in acupuncture. It is a scientific mode of treatment based on the principle of pressure and stimulation. It flushes out the toxins from the affected part and relaxes it by stimulating the related points through acupressure.<sup>5</sup> This therapy can administer anyone in the house, that why it is very feasible to practice to conduct study. In India less than 5% people having knowledge regarding this therapy.

The present study was undertaken with an aim to identify the prevalence of dysmenorrhea among adolescent girls in a selected school Gurugram, Haryana. to compare the effectiveness of acupressure at sp6 on dysmenorrhea before and after the administration of acupressure using Numerical Pain Rating Scale.

## NEED OF STUDY:

India has one of the fastest growing youth populations in the world, with an estimated 190 million adolescents. Girls below 19 years of age comprising 21% of India's total population. In India 67.2% adolescent girls suffer from dysmenorrhea and 60% of them have disrupted daily routines. Menstrual pain or dysmenorrhea is the pain in the lower abdomen before or during menstruation. The pain sometimes radiates to the lower back or thigh area and can range from mild to severe. Other symptoms may include nausea, vomiting, loose stools, sweating, and dizziness. Pharmacological method is not effective and useful in the dysmenorrhea but non-pharmacological method are most effective, useful, and cost free.

The incidence of menstrual pain to women in the world is relatively high on the average of more than 50% in every country. In the United States the percentage of women suffering from dysmenorrhea is about 60% and 72% in Sweden, while in Indonesia it reaches to 55% (Proverawati and Misaroh, 2009). The study by Wong and Khoo in Malaysia found as many as 74.5% of teens who have reached menarche experienced dysmenorrhea. According to Kumbhar et al, of 183 teenagers aged 14-19 years in India, as many as 119 or 65% of them were found experiencing dysmenorrhea. The consequences of untreated dysmenorrhea range from lost of work and school hours to family and personal disruption. Therefore, dysmenorrhea affected not only the untreated person but also affected family, social and national economics as well.<sup>6</sup>

The present study was undertaken with an aim to identify the prevalence of dysmenorrhea among adolescent girls in a selected school Gurugram, Haryana. to compare the effectiveness of acupressure at sp6 on dysmenorrhea before and after the administration of acupressure using Numerical Pain Rating Scale.

## REVIEW OF LITERATURE:

**Kural et. al., (2015)** conducted a descriptive study to assess the pain among children and adolescents has been identified an important public health problem. The results of the 310 adolescent girls (18-25) years.

Dysmenorrhea was reported in 84.2%(261) girls. And 49 reported no dysmenorrhea. 34.2% had experienced severe pain. 36.6% had moderate pain and 29.2% had mild pain. <sup>7</sup> **Azmeen, et.al.(2017)** conducted a study to assess the effectiveness of the acupressure in reducing pain due to dysmenorrhea among B.sc (Hons) nursing student. 44% student nurses suffered from dysmenorrhea. The study revealed that the mean pre-test pain score (8.01) was higher than mean post-test pain score (0.95) with a mean difference of (7.15), There was significant difference in pain score before and after administration of acupressure (sp6) ( $z=36$ ) at 0.05 level of significance. <sup>8</sup> **Christina, Geeta Sahu, et.al.(2016)** The study was conducted to assess the effectiveness of acupressure therapy on menstrual pain perception among adolescent girls with primary dysmenorrhea in Peoples College of Nursing, Bhanpur, Bhopal, M.P. Totally 60 samples were taken. The pre-test pain score mean was 6.18 and post-test pain score mean was 1.88. The calculated value of 't' was 7.41 which was very much higher than the tabulated 'p' value.<sup>9</sup> **Premila .E (2017)** this study was conducted to assess the level of pain in dysmenorrhea. From the findings the study has been concluded that during pretest majority that around 15(50%) had moderate pain and 15(50%) had severe pain. Whereas during posttest 16 (53%) were mild pain and 14(47%) had moderate. And overall mean difference was 3.2 with SD 1.5 and t test value was 11.9 at the level of  $p < 0.001$ . It showed that statistically significant difference between pre and posttest. Hence the acupressure therapy was found to be effective in reducing dysmenorrhea among adolescent girls. Chi square association shows that there was the association found between the level of dysmenorrhea with food patten<sup>10</sup> A study was conducted in West Indies to determine the prevalence of dysmenorrhea on Hispanic female adolescents shows that 85% of them reported dysmenorrhea, 38% reported missing school due to dysmenorrhea, 33% reported missing individual classes. Activities affected included class concentration [59%], sports [51%], class participation [50%], socialization [46%], and homework [35%], test-taking skills [36%], and grades [29%]. Treatment taken for dysmenorrheal included rest [58%], medications [52%], heating pad [26%], tea [20%], exercise [15%] and herbs [7%]. The study concluded that adolescent girls with dysmenorrhea are affected by lack of attendance to school, concentration and other daily activities.

## METHODOLOGY:

**RESEARCH APPROACH:** In this study quantitative research approach was adopted.

**RESEARCH DESIGN:** The research design used in this study was the true experimental, "Two group pretest, posttest design" was assessing the effectiveness of acupressure to reduce the dysmenorrhea among adolescent girls.

### REPRESENTATION OF RESEARCH DESIGN

	PRETEST	INTERVENTION	POSTTEST
EXPERIMENTAL GROUP	O1	X	O2
CONTROL GROUP	O1	-	O2

KEY:

O1: Pretest pain score

O2: Posttest pain score

X: Intervention(acupressure)

**SETTING OF THE STUDY:**

This study was conducted in Govt. Girls. Sr. Sec. School, Jacobpura, Gurugram Haryana.

**RESEARCH POPULATION:**

The population under study was all the adolescent girls with dysmenorrhea.

**ACCESSIBLE POPULATION**

Adolescent girls in the age group between 12-18 years with dysmenorrhea.

**SAMPLE:**

Adolescent girls with dysmenorrhea, and those who was fulfill the inclusion criteria.

**SAMPLING TECHNIQUE:**

In this study, Probability simple random sampling, ("Flip a coin method") technique was used for the selection of the samples.

**SAMPLE SIZE:**

Sample size was 60 adolescent girls with dysmenorrhea, 30 in experimental and 30 in control group.

**The following tools were used:****Tool 1: Demographic variables.****Tool 2: Numeric pain rating Scale.**

No pain-0

Mild – 1-3

Moderate – 4-6

Severe – 7-10

**OBJECTIVES:**

- To assess the dysmenorrhea among adolescent girls in Experimental and Control group.
- To compare the level of dysmenorrhea symptoms before and after the application of acupressure, in the experimental group and in the control group.
- To find out the association level of dysmenorrhea with selected demographic variables in Experimental group and control group.

**HYPOTHESIS:**

- **H1:** There is a significant difference in level of dysmenorrhea before and after application of acupressure in experimental group.
- **H2:** There is a significant association of pre intervention level of dysmenorrhea with selected demographic variables among adolescent girls.

**DESCRIPTION OF THE DATA ANALYSIS:**

The analysis of the data is organized and presented under the following headings.

- **SECTION I:** Description of the subject by demographic variables

- **SECTION II:** Compare the level of pain before and after application acupressure among experimental and control group.
- **SECTION III:** Evaluate the effectiveness of acupressure for dysmenorrhea among adolescent girls.
- **SECTION IV:** Finding Association of the post-test pain score of adolescent girls with selected demographic variables.

## RESULTS AND DISCUSSION:

### DESCRIPTION OF THE SUBJECT BY DEMOGRAPHIC VARIABLES

This section describes the demographic variables of adolescent girls with dysmenorrhea, Govt. school Jacobpura Gurugram. The demographic variables are describing in term of age, age of menarche, educational class, type of family, duration of cycle, religion, food habit, mother education, family income/month, onset of pain, which body part feel pain, and what treatment taken during dysmenorrhea.

Table 1: Frequency and percentage distribution of subject according to demographic variables.

N=60

SECTION-1 SOCIO DEMOGRAPHIC PROFORMA		Experimental f(%)	Control f(%)	Experimental (N=30)	Control (N=30)
AGE IN YEAR	<13	0%	0%	0	0
	13-14	7%	7%	2	2
	15-17	67%	63%	20	19
	>17	26%	30%	8	9
AGE OF MENARCHE	10-11	0%	0%	0	0
	12-13	40%	43%	12	13
	13-14	60%	57%	18	17
	15-16	0%	0%	0	0
EDUCATION CLASS	8th class	0%	0%	0	0
	9th class	23%	30%	7	9
	10th class	20%	20%	6	6
	11th class	27%	23%	8	7
	12th class	30%	27%	9	8
TYPE OF FAMILY	Nuclear Family	60%	77%	18	23
	Joint Family	40%	23%	12	7
DURATION OF CYCLE	<3 days	7%	17%	2	5
	3-5 days	83%	57%	25	17
	> 6days	10%	26%	3	8
RELIGION	Hindu	87%	90%	26	27
	Muslim	13%	10%	4	3
	Sikh	0%	0%	0	0
	Christian	0%	0%	0	0
	Other	0%	0%	0	0
FOOD HABIT	Veg	87%	83%	26	25
	Non-veg	13%	17%	4	5
MOTHER EDUCATION	Non literate	3%	13%	1	4
	5th class	20%	24%	6	7
	10th class	33%	43%	10	13
	12th class	27%	10%	8	3

	Graduate / and above	17%	10%	5	3
MONTHLY INCOME	<10,000	10%	60%	3	18
	10,000-20,000	57%	23%	17	7
	21,000-30,000	30%	17%	9	5
	>30,000	3%	0%	1	0
ONSET OF PAIN	Before menstruation	50%	47%	15	14
	With onset of menstruation	50%	53%	15	16
	After 6 hours of menstruation	0%	0%	0	0
	After 24 hours of menstruation	0%	0%	0	0
WHICH BODY PART FEEL PAIN	Lower abdomen only	60%	53%	18	16
	Lower abdomen and back only	23%	27%	7	8
	Lower abdomen, back and legs	17%	20%	5	6
	Other body parts	0%	0%	0	0
WHAT TREATMENT TAKEN	Bed rest	33%	71%	10	21
	Massage	17%	3%	5	1
	Hot bag compression	30%	13%	9	4
	Use of medicine/analgesics	20%	13%	6	4

## SECTION II: TO COMPARE THE LEVEL OF PAIN BEFORE AND AFTER APPLIED ACUPRESSURE AMONG EXPERIMENTAL AND CONTROL GROUP.

**TABLE 2: REPRESENTING THE FREQUENCY AND PERCENTAGE DISTRIBUTION OF ADOLESCENT GIRLS ACCORDING TO THE LEVEL OF PAIN IN EXPERIMENTAL GROUP AND CONTROL GROUP BEFORE INTERVENTION. N-60**

CRITERIA MEASURE OF NPRS SCORE		
Category Score	Pre Experimental	Pre Control
SEVERE(7-10)	11(36.7%)	8(26.7%)
MODERATE(4-6)	12(40%)	15(50%)
MILD(1-3)	7(23.3%)	7(23.3%)
NONE(0)	0(0%)	0(0%)

**FIGURE 1: SHOWING THE LEVEL OF PAIN BEFORE INTERVENTION IN EXPERIMENTAL AND CONTROL GROUP**

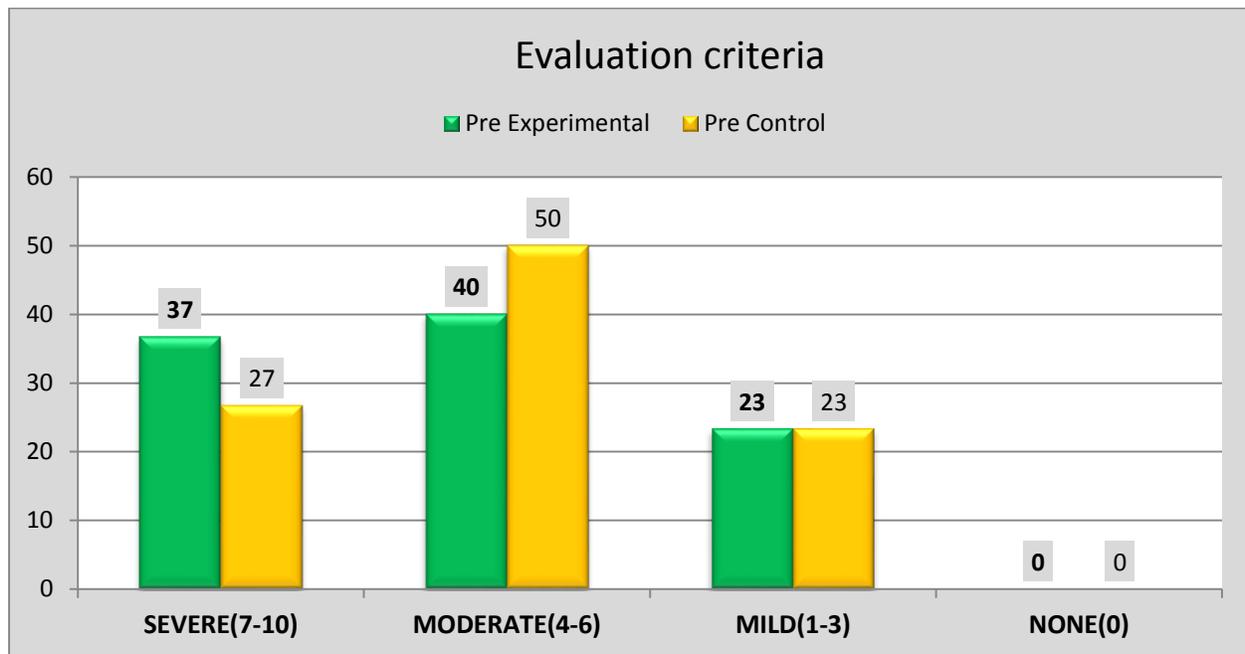


Table 2 and figure 1 represents, before the intervention, in experimental group 11(36.7%) had Severe pain, 12(40%) had moderate pain, 7(23.3%) had mild pain and none of them had no pain. In control group 8(26.7%) had severe pain, 15(50%) had moderate pain, 7(23.3%) had mild pain and none of them had no pain.

**TABLE-3: FINDING COMPARISON OF MEAN PRE- TEST PAIN SCORE AMONG ADOLESCENT GIRLS WITH DYSMENORRHEA IN EXPERIMENTAL AND CONTROL GROUP.**

N=60

	Descriptive Statistics	Mean Score	S.D.	Median Score	Maximum	Minimum	Range	Mean %
PRE	Experimental	5.40	2.486	5.5	10	1	9	54.00
	Control	4.93	2.016	4.5	8	1	7	49.33
		Maximum =	10	Minimum =	0			

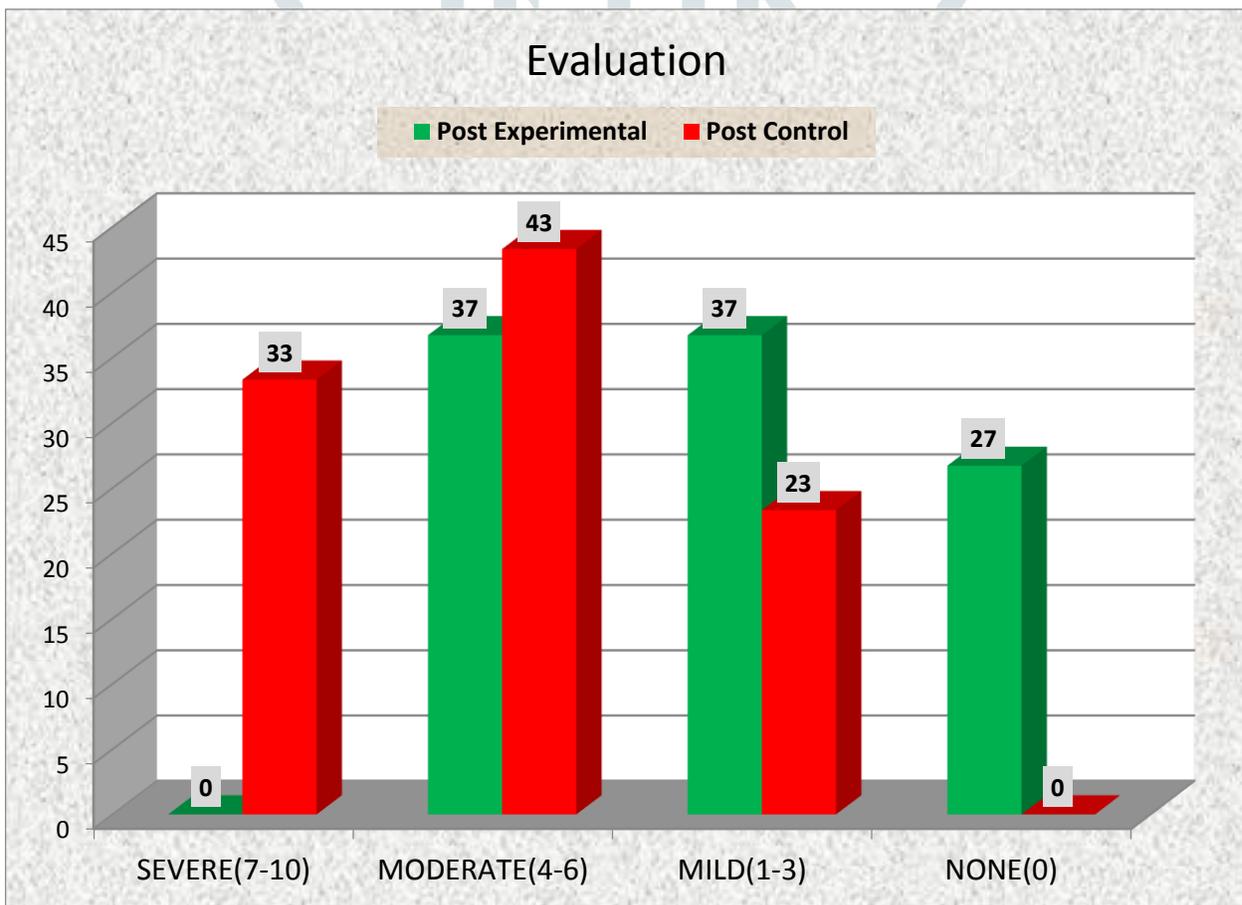
The tables' displays the descriptive statistics of the maximum, mean, standard deviation and mean percentage of pain score. In pretest the group-wise comparison of mean, Standard Deviation and mean percentage score regarding pain score shows that the mean score (5.40±2.486) 54.00 % of the total score was observed during experimental group. In control group pretest pain mean score (4.93±2.016) 49.33% was observed during control Group.

**TABLE 4: FREQUENCY AND PERCENTAGE DISTRIBUTION OF ADOLESCENT GIRLS ACCORDING TO THE LEVEL OF PAIN IN EXPERIMENTAL GROUP AND CONTROL GROUP AFTER INTERVENTION.**

N=60

CRITERIA MEASURE OF NPRS SCORE		
Category Score	Post Experimental	Post Control
SEVERE(7-10)	0(0%)	10(33.3%)
MODERATE(4-6)	11(36.7%)	13(43.3%)
MILD(1-3)	11(36.7%)	7(23.3%)
NONE(0)	8(26.7%)	0(0%)

**FIGURE 2: IS SHOWING THE LEVEL OF PAIN SCORE AFTER INTERVENTION IN EXPERIMENTAL AND CONTROL GROUP.**



- **TABLE 4 AND FIGURE 2** represents, After the intervention, in experimental group none of them had Severe pain, 11(36.7%) had moderate pain, 11(36.7%) had mild pain and 8(26.7%) had no pain.
- In control group 10(33.3%) had severe pain, 13(43.3%) had moderate pain, 7(23.3%) had mild pain and none of them had no pain.

**TABLE 5: FINDING COMPARISON OF MEAN POST TEST PAIN SCORE AMONG ADOLESCENT GIRLS WITH DYSMENORRHEA IN EXPERIMENTAL AND CONTROL GROUP.**

N=60

	Descriptive Statistics	Mean Score	S.D.	Median Score	Maximum	Minimum	Range	Mean%
POST	Experimental	2.50	1.925	3	6	0	6	25.00
	Control	5.00	2.068	4.5	8	1	7	50.00
		Maximum=	10	Minimum=	0			

- The tables' displays the descriptive statistics of the maximum, mean, standard deviation and mean percentage of pain score. In posttest the group-wise comparison of mean, Standard Deviation and mean percentage score regarding pain score shows that the mean score ( $2.50 \pm 1.925$ ) 25.00 % of the total score was observed during experimental group.
- In control group posttest pain mean score ( $5.00 \pm 2.068$ ) 50.00% was observed during control Group.

### SECTION 3 - FINDINGS RELATED TO THE EFFECTIVENESS ACUPRESSURE FOR DYSMENORRHEA AMONG ADOLESCENT GIRLS.

**TABLE NO 6= Finding The Comparison Between The Group And With In The Group In Experimental And Control With The Paired 't' Test And Unpaired 't' Test Among Adolescent Girls With Dysmenorrhea.**

N=60

		NPRS Score				Paired T Test		
		Pretest		Posttest				
Group	N	Mean	SD	Mean	SD	df	T	Result
Experimental Group	30	5.40	2.486	2.50	1.925	29	15.967	Significant
Control Group	30	4.933	2.016	5.00	2.068	29	1.439	Non Significant
Unpaired T Test	df	58		df	58			
	T	0.799		T	4.846			
	Result	Non Significant		Result	Significant			

Maximum = 10 Minimum = 0

Table 6 represents paired 't' test and unpaired 't' test. Paired 't' test after intervention in experimental group, the mean score level of pain was 5.40 in pretest and 2.50 in posttest. Calculated paired t test value was 15.967 was found to be more than the table value. This data had indicated that there was significant reduction of pain score, hence null hypothesis was rejected and research hypothesis was accepted.

- In control group, the mean score was 4.933 in pretest and 5.00 in posttest. The paired 't' test value was 1.439 which is not significant at  $p < 0.05$

- Unpaired 't' test in experimental group, the pretest mean score was 5.40, in control group the mean pretest score was 4.933. The unpaired t test value was 0.799 which is not significant at  $p < 0.05$  level of significance. There is no difference between the groups, that is both group are same.
- Unpaired 't' test after intervention in experimental group, the mean post test score was 2.50. In control group, the mean post test score was 5.00. Calculated unpaired t test value 4.846 was found to be more than the table value. This data had indicated that there was significant reduction of pain score, hence research hypothesis was accepted. The whole data had denoted that Acupressure was highly effective in reducing level of pain.

#### SECTION 4: ASSOCIATION OF LEVELS OF PAIN BETWEEN EXPERIMENTAL AND CONTROL GROUP WITH SELECTED DEMOGRAPHIC VARIABLES REGARDING ACUPRESSURE

**Association between the levels of Pain and demographic variables in Experimental Group:**

**Table 7 Association – experimental group - Pre Test**

This section dealt with association between the levels of pain regarding the dysmenorrhea among adolescent girls with their demographic variables. The cross tabulation analysis was employed effectively for pretest and posttest of experimental group and the results of chi square analysis were observed and shown in Table 7.

Demographic Variables		Association of NPRS Score with Demographic variables (Pre NPRS) Experimental Group								
Variables	Opts	NONE	MILD	MODERAT	SEVERE	Chi Test	P Value	df	Table Value	Result
AGE IN YEAR	<13	0	0	0	0	7.610	0.107	4	9.488	Not Significant
	13-14	0	2	0	0					
	15-17	0	4	9	7					
	>17	0	1	3	4					
AGE OF MENARCHE	10-11	0	0	0	0	3.846	0.146	2	5.991	Not Significant
	12-13	0	5	4	3					
	13-14	0	2	8	8					
	15-16	0	0	0	0					
EDUCATION CLASS	8th class	0	0	0	0	7.470	0.280	6	12.592	Not Significant
	9th class	0	3	3	1					
	10th class	0	1	4	1					
	11th class	0	2	3	3					
	12th class	0	1	2	6					
TYPE OF FAMILY	Nuclear Family	0	3	8	7	1.140	0.566	2	5.991	Not Significant
	Joint Family	0	4	4	4					
DURATION OF CYCLE	<3 days	0	1	0	1	1.900	0.754	4	9.488	Not Significant
	3-5 days	0	5	11	9					
	> 6days	0	1	1	1					
RELIGION	Hindu	0	5	10	11	3.214	0.200	2	5.991	Not Significant
	Muslim	0	2	2	0					

	Sikh	0	0	0	0					
	Christian	0	0	0	0					
	Other	0	0	0	0					
FOOD HABIT	Veg	0	5	10	11	3.214	0.200	2	5.991	Not Significant
	Non-veg	0	2	2	0					
MOTHER EDUCATION	Non literate	0	0	1	0	3.929	0.863	8	15.507	Not Significant
	5th class	0	2	3	1					
	10th class	0	2	4	4					
	12th class	0	2	3	3					
	Graduate / and above	0	1	1	3					
MONTHLY INCOME	<10,000	0	0	2	1	5.842	0.441	6	12.592	Not Significant
	10,000-20,000	0	5	8	4					
	21,000-30,000	0	2	2	5					
	>30,000	0	0	0	1					
ONSET OF PAIN	Before menstruation	0	1	9	5	6.662	0.036	2	5.991	Significant*
	With onset of menstruation	0	6	3	6					
	After 6 hours of menstruation	0	0	0	0					
	After 24 hours of menstruation	0	0	0	0					
WHICH BODY PART FEEL PAIN	Lower abdomen only	0	5	6	7	3.839	0.428	4	9.488	Not Significant
	Lower abdomen and back only	0	2	4	1					
	Lower abdomen, back and legs	0	0	2	3					
	Other body parts	0	0	0	0					
WHAT TREATMENT TAKEN	Bed rest	0	4	3	3	4.339	0.631	6	12.592	Not Significant
	Massage	0	1	2	2					
	Hot bag compression	0	2	3	4					
	Use of medicine/analgesics	0	0	4	2					

## NURSING IMPLICATION:

### Nursing practice:

Nurses when working in the clinical settings may come across many patients with menstrual problems like, dysmenorrhea, irregular menstrual cycle, menorrhagia, etc. If the nurse has knowledge regarding acupressure she can teach this to the patients so that they will get knowledge on non-invasive, nonpharmacological, treatment without side effects. It does not require additional equipment, articles, place or extra precautions. It also helps in building up nurse patient relationship. Findings of the study also add knowledge in the field of nursing regarding the effect of non-pharmacologic interventions. Nurses with the knowledge and skills of acupressure help to improve the practices of treatment in areas like dysmenorrhea, irregular menstrual cycle and menorrhagia.

**Nursing education:**

Dysmenorrhea is one of the major causes for absenteeism. Dysmenorrhea reduces academic performances. Acupressure is one of the simple and non-pharmacological measures to relieve pain. Acupressure can be a self-treatment. It can be used anywhere at any time. Even while in a class room if a student undergoes dysmenorrhea acupressure can be used to reduce pain. Now a day's people are giving more importance to non-pharmacological measures in reducing pain. Hence, it is appropriate to give emphasis on non-pharmacological measure in nursing curriculum and nursing education. The knowledge and learning experience of students on acupressure will help in adopting these non-pharmacological measures in reducing pain in different disease conditions.

**Nursing administration:**

As an administrator she can arrange in-service education programs for students and staff nurses regarding non pharmacological treatment for dysmenorrhea. She can encourage all the staffs to undergo training on acupressure and encourage them to use acupressure as one of the management for dysmenorrhea whenever they come across patient with dysmenorrhea in hospitals, communities and other settings. This information could be disseminated through media, like newspaper, television, radio, internet etc. she can also provide administrative support for conducting such activities.

**Nursing research**

Dysmenorrhea is the most common gynecological disorder among adolescents. So, it is necessary to conduct research in non-pharmacological measures for dysmenorrhea. This study can be conducted in other geographical areas and among larger samples. Despite renewed interest in the use of acupressure, relatively few studies have been undertaken to examine its effects on primary dysmenorrhea. Such research may be useful in reducing absenteeism and it may improve the academic performances of the students with dysmenorrhea.<sup>12</sup>

**RECOMMENDATION:** Some recommendations are expected to be useful for the following:

1. A similar study can be conducted to see the effectiveness acupressure in large scale.
2. A video assisting teaching program can be conducting to check the knowledge of adolescent girls.
3. A comparative study can be conducted to see the effectiveness of acupressure between rural and urban adolescent girls.
4. A similar study conducted by using self-instruct module to see the effectiveness of acupressure and relief of dysmenorrhea.

**CONCLUSION:**

Acupressure that can be used in all the areas of nursing intervention to prevent, to promote, to maintain and to modify variety of pain in the adolescents. In pretest the most adolescent girls in the severe level of pain 72%, after giving acupressure no one was in the severe level of pain category of the experimental group, so it showed the effectiveness of acupressure. From that we concluded that need of acupressure as a non-pharmacological method for pain relieving measure.

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