

# AN EXPERIMENTAL STUDY TO ASSESS THE EFFECTIVENESS OF ACUPRESSURE ON DYSMENORRHEA AMONG ADOLESCENT GIRLS AT AMMAIYAR SCHOOL, KARAIKAL.

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## ABSTRACT

*It was the study to assess the effectiveness of acupressure therapy on dysmenorrhoea. Acupressure is an ancient healing art that uses fingers to press key points on the surface of the skin to stimulate body's natural self-curative abilities. When these points are pressed, they release muscular tension and promote the circulation of blood and body's life force to aid healing. Acupressure therapy is effective in the relief of stress-related ailments, and is ideal for self-treatment and preventive healthcare for boosting the immune system. Acupressure for dysmenorrhoea may offer women a noninvasive, cost-free, and timely way to manage dysmenorrhoea on their own, thereby saving time, cost, and effort. The study was carried out among 30 adolescent girls between the age group of 14-16 years who are in Ammaiyar School, Karaikal. Ethical clearance was obtained from all adolescent girls who are in the study. The study findings shows that around 15(50%) had moderate pain and 15(50%) had severe pain in pre test score. Whereas 16 (53%) were mild pain and 14(47%) had moderate pain in post assessment of experimental group.*

**Keywords:** Effectiveness, acupressure, dysmenorrhoea, adolescent girl.

## INTRODUCTION:

One of the major physiological changes that take place in girls is the attainment of menarche and it is the transitional phase of life in girls. Menstruation is the periodic uterine bleeding that begins with the shedding of secretory endometrium approximately 14 days after ovulation. During this normal physiological phenomena most of the girls experiences pain and discomfort. Dysmenorrhoea is defined as painful menses in women with normal pelvic anatomy began during adolescent lasting one to three days.

Approximately it is estimated that 40-50% of the women experiences dysmenorrhoea in the reproductive life. Dysmenorrhoea is the leading cause of recurrent short term school absent in adolescent girls and a common problem for women of reproductive age.

Menstrual pain or dysmenorrhoea 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. Pain can typically last 12 to 72 hours.

There are two types of Dysmenorrhoea: Primary and secondary dysmenorrhoea. Primary dysmenorrhoea is common menstrual pain that is recurrent and is not due to other disease. Secondary Dysmenorrhoea is the pain that is

caused by reproductive tract disorders such as endometriosis, adenomyosis, pelvic inflammatory disease, uterine fibroids, and uterine polyps.

Dysmenorrhoea is managed with different therapeutic modalities such as Non Steroidal Anti Inflammatory Drugs, hormonal contraceptives, transdermal nitro-glycerin, thiamine, vitamin E and alternative modalities like acupressure, behavioural interventions, topical heat, and transcutaneous electrical nerve stimulation. Among these Acupressure is one of the most popular alternative modality which is been practiced worldwide presently.

Acupressure is a Traditional Chinese Medicine (TCM), and it is a therapeutic technique of applying digital pressure in a specified way on designated point on the body to relief pain, produces analgesia, or regulates body function. According to the theory of acupressure, 657 designated points can be massaged. The points run along 12 pathways or meridians that connect the points on each half of the body.

The Acupoint Sp6 or San Yin Jiao or Spleen 6 is a miraculous point for all women and even young girls who attained puberty. Activating this point by pressing and releasing every day as a preventive measure for reducing the problems like pre-menstrual syndrome, dysmenorrhoea, irregular menstruation, excess or heavy bleeding, fibroids etc. This is because of SP6 points strongly produces the flow of energy (qi) and blood. So stimulating this point will helps to improve digestion, produces energy, and reduces pain and can be used to prevent or treat for acute cramps.

Adolescent girls constitute one-fifth of the female population in the world. Girls below 19 years comprise one quarter of India's population. A study done in Sweden showed that more than 50% of all menstruating women experienced some discomfort.

Dawns O.S et al (2011) conducted explorative to find out the prevalence of dysmenorrhoea among adolescent girls. Result showed that majority of adolescent girls under study had experienced dysmenorrhoea (79.67%). The researcher concluded that dysmenorrhoea is a very common problem among adolescent girls.

Weisman (2013) conducted to find out the effect of acupressure at the San Yin Jiao point on symptoms of primary dysmenorrhoea among adolescent girls. The result showed that 87% of experimental participants reported acupressure was helpful and 94% were satisfied with acupressure therapy. The researcher concluded that acupressure was effective in reducing dysmenorrhoea.

### **STATEMENT OF THE PROBLEM:**

An Experimental Study to Assess the Effectiveness of Acupressure on Dysmenorrhea among Adolescent Girls at Ammaiya School, Karaikal.

### **OBJECTIVES:**

- To assess the level of dysmenorrhoea among adolescent girls before acupressure therapy.
- To assess the level of dysmenorrhoea among adolescent girls after acupressure therapy.
- To associate the level of dysmenorrhoea among adolescent girls with selected demographic variables.

### **HYPOTHESIS:**

H1: There will be a significant relationship between level of dysmenorrhoea among adolescent girls with acupressure therapy.

H0: There will not be a significant relationship between level of dysmenorrhoea among adolescent girls with acupressure therapy.

## MATERIALS AND METHODS:

**Research approach:** Quantitative approach

**Research design:** The research design chosen for the present study is pre experimental design.

**Setting:** Ammaiyar School, Karaikal.

**Population:** The population includes all postnatal mothers with episiotomy who are admitted in postnatal ward of government general hospital Karaikal.

**Sampling technique:** Purposive sampling technique.

**Sample size:** The sample size for the present study 30.

**Ethical consideration:** Informed consent was obtained from all adolescent girls

**Inclusion criteria:** The study includes

- ❖ Adolescent girls between the age group of 14-16 years.
- ❖ Available during data collection.
- ❖ Willing to participate in the study.
- ❖ Without any medical disorders.

### Collection of data

- ❖ Demographic characteristics
- ❖ Visual analogue scale.

### Method of data analysis and presentation

Both inferential and descriptive statistics.

## RESULT DISCUSSION:

The study was carried out among 30 adolescent girls between the age group of 14-16 years who are in Ammaiyar School, Karaikal. Ethical clearance was obtained from all adolescent girls who are in the study. In this study purposive sampling technique was used. Socio demographic data were collected by using structured interview schedule and level of dysmenorrhoea was assessed by visual analogue scale prior to the acupuncture therapy. After the assessment level of dysmenorrhoea by applying pressure with the fingers to specific pressure point located at the highest peak of the angle, four finger widths above the leg which is also known as SP6 or San Yin Jiao or Spleen 6 is to be given.

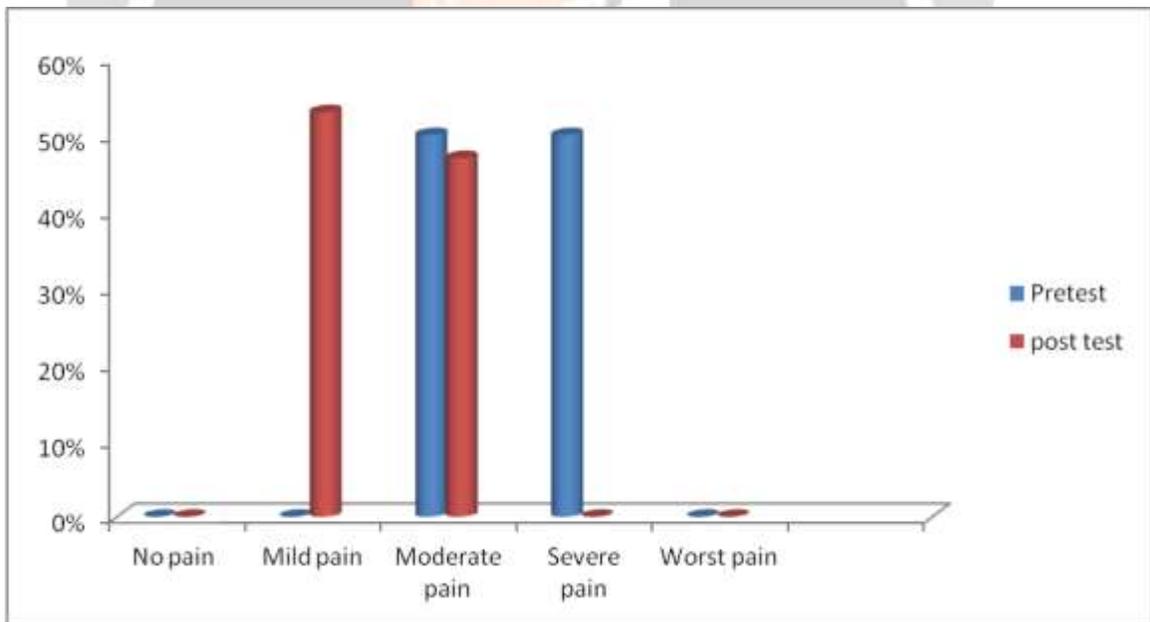
Statistical Analysis of Qualitative data was summarized into count & percentages, and quantitative data into mean & standard deviation. Comparison, of qualitative variables, between pre test and post test was done by Chi-square test while of quantitative variables by 't' test (paired & unpaired). The comparison was said to be significant if p was less than 0.05.

The table shows that around 15(50%) had moderate pain and 15(50%) had severe pain in pre test score. 16 (53%) were mild pain and 14(47%) had moderate pain in post assessment of experimental group.

**TABLE: 1**

**Pre and Post Assessment Level of Dysmenorrhea among Adolescent Girls**

Sl No	Level of pain	Experimental			
		Pre Test		Post Test	
		N	%	n	%
1	No Pain (0)	0	0	0	0
2	Mild Pain (1-3)	0	0	16	53
3	Moderate Pain (4-6)	15	50	14	47
4	Severe Pain(7-9)	15	50	0	0
	Worst Pain (10)	0	0	0	0



**TABLE: 2**

**Comparison and Effectiveness of Acupressure on Dysmenorrhea among Adolescent Girls**

Before Intervention		After Intervention		Effectiveness (Difference)		Effectiveness
Mea	SD	Mean	SD	Mean	SD	't' Test

6.5	1.5	3.3	1.4	3.2	1.5	11.9
						P<0.001***

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 shows that statistically significant difference between pre and post test. Hence the acupressure therapy was found to be effective in reducing dysmenorrhea among adolescent girls.

Association of demographic variables with level of pain was done using Chi-Square test. Although there was no statistically significant association found between level of dysmenorrhoea and demographic variables such as religion, type of family, place of living, educational status. Only the association found between the level of dysmenorrhoea with food pattern.

## CONCLUSION:

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 post test 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 post test. 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 dysmenorrhoea with food pattern.

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