

## Effectiveness of Acupressure (Sp6) On Dysmenorrhoea among Adolescent Girls (13-15 yrs)

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### **Abstract:**

**Introduction:** Dysmenorrhoea is painful cramps originating in the uterus just prior to or during menstruation. Various studies show that the prevalence of dysmenorrhoea in adolescent females has been reported to be 67.2%.

**Objectives:** Objective of the study was to evaluate the effectiveness of acupressure (sp6) on dysmenorrhoea among adolescent girls (13-15 yrs)

**Methodology:** Quantitative approach with quasi experimental design with non randomized control group design was for this study. Structured administer Dysmenorrhoea assessment scale and demographic variables and clinical data were used as a tool for data collection. 30 samples for experimental group and 30 samples for control group were selected by convenience sampling. Data was collected from Higher Secondary Schools at Madurai in Tamil Nadu.

**Results:** The study result that obtained "t" value of experimental group posttest 1st 8.87 ( $p < 0.001$ ) and posttest 3rd 23.17 ( $p < 0.001$ ) was highly significant. The unpaired "t" value in between control and experimental group posttest 3rd 10.03 ( $p < 0.001$ ) was highly significant. Data had no association between the levels of dysmenorrhea with selected demographic variables.

**Conclusion:** The study findings concluded that acupressure SP6 point was effective on dysmenorrhoea among adolescent girls.

**Keywords:** Dysmenorrhoea , Acupressure sp6 , Adolescent girls.

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### **I. Introduction:**

Menstrual problems include delayed menarche, irregular periods, amenorrhea, menorrhagia, premenstrual syndrome, dysmenorrhoea and endometriosis. Among which dysmenorrhoea is common which affects 40-95 percent of menstruating women, and are the most common causes of irregular absenteeism among young women (Vance et al, 1996). The prevalence in adolescent females has been reported to be 67.2% by one study and 90% by another. Dysmenorrhoea can decrease productivity, creativity and work performance due to serious daily stress and social and economic loss (Davis and Westhoff, 2001).

S-H Cho, E-W Hwang (2010) reported primary dysmenorrhoea refers to any degree of perceived cramping pain during menstruation without any evident pathology. Primary dysmenorrhoea affects most women throughout the menstrual years. Dysmenorrhoea is severe cause to absence from work occurs in less than 5% of women. In spite of advances in the treatment of primary dysmenorrhea, a recent study of 1546 menstruating Canadian women found that 60% had the disorder. Women are frequent users of complementary and alternative medicine in many countries, including the USA where women (48.9%) use complementary and alternative therapy more than men (37.8%). Many women may seek alternative to conventional medicine for the treatment of dysmenorrhea.

Parker.MA et. al. (2009) Teenage girls with menstrual pain regularly present to physicians. The experience of pain with menstruation is common for 70-91% of teenagers. Also, there are a number of physical, psychological and emotional symptoms that occur premenstrual periods and during menstruation, which are reported by 96% of teenagers. Menstrual pain and symptoms cause school absence in 14-51% of teenagers and interference with life activities for 15-59%. Severe menstrual pain has been reported to occur in 14-23% of teenagers.

The healing art of Acupressure is at least 5,000 years old and remains the third most popular method for pain and illness relief in the world. It is a complete health system that has been documented to be used for over 3000 conditions. A popular point for alleviating menstrual cramps is called sp6 (spleen 6). Stimulating spleen 6 can help reduce menstrual pain, and regulate menstrual cycle and improve the energy.

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Sushma Danny. S (2009) conducted study on effectiveness of acupressure on reducing dysmenorrhea among nursing students at Mangalore. In this study pre experimental one group pretest posttest design was used and convenience sampling technique was used to select the sample. The result of the posttest mean score (35.33%) is lower than mean pretest scores (53.67%). Dysmenorrhea scores were reduced after giving acupressure. The paired 't' test ( $t=6.26$ ,  $p<0.05$ ) shows that there is significant difference between dysmenorrhoea scores before and after acupressure. It reveals that acupressure was effective in reducing dysmenorrhea.

**Statement of the problem:** Quasi experimental Study to evaluate the effectiveness of acupressure (SP6) on dysmenorrhoea among adolescent girls (13-15 yrs) in selected schools at Madurai.

## II. Objectives

1. Assess the level of dysmenorrhoea among control and experimental group.
2. To evaluate the effectiveness of acupressure on dysmenorrhoea among experimental group.
3. To find out the difference on the effectiveness of acupressure in the control and experimental group.
3. To Find out the association between the level of dysmenorrhoea with demographic variables among control and experimental group.

## III. Methodology

Quantitative approach with quasi experimental design with non randomized control group design was for this study. The conceptual framework of the present study is based on wiedenbach's prescriptive theory. Structured administer Dysmenorrhoea assessment scale and demographic variables and clinical data were used as a tool for data collection. 30 samples for experimental group and 30 samples for control group were selected by convenience sampling. Data was collected from Higher Secondary Schools at Madurai in Tamil Nadu.

### Method of data collection

1. Data was collected for the period of six weeks. The adolescent girls in the experimental group were assessed for level of dysmenorrhoea by using dysmenorrhoea assessment scale before intervention (pretest).
2. Then acupressure was given for 20 mints, at the end of 20 mints dysmenorrhoea were assessed by using dysmenorrhoea assessment scale (posttest 1<sup>st</sup>).
3. After 1hour again acupressure was given for 20 mints and reassessed the level of dysmenorrhoea (posttest 2<sup>nd</sup>).
4. After 2hours from 2<sup>nd</sup> posttest again acupressure was given and reassessed the level of dysmenorrhoea (posttest 3<sup>rd</sup>).

## IV. Results

The data collected from 60 samples were grouped, 30 as control group and 30 as experimental group analyzed using descriptive and inferential statistics. The results are presented based on the objectives of the study.

1. During the pretest in control group adolescent's girls 23(77%) had mild symptoms of dysmenorrhoea, 7 (23%) had moderate symptoms and experimental group adolescents girls 26 (87%) had mild symptoms and 4(13%) had moderate symptoms.
2. During posttest 3<sup>rd</sup> in experimental group adolescents girls 2 (7%) had no symptoms, 25 (83%) had mild symptoms and 3 (10%) had moderate symptoms in experimental group.
3. This study showed that the overall symptoms mean score 55.43 in pretest and posttest 1<sup>rd</sup> 50.06 and posttest 3<sup>rd</sup> 38.37. The level of dysmenorrhoea symptoms are positively highly significant paired "t" test value 8.87\*\*\* at ( $p<0.001$ ) in posttest 1<sup>st</sup> and posttest 3<sup>rd</sup> paired "t" value 23.17\*\*\* at ( $p<0.001$ ) level.

**Table 1: Effects of Acupressure on Dysmenorrhoea among Adolescent Girls In Between Pretest and Post Test 1<sup>st</sup> of Experimental Group N=30**

	Experimental Group				Difference Mean %	't'- value
	Pretest		posttest 1 <sup>st</sup>			
	Mean	SD	Mean	SD		
Physiological symptoms	37.07	3.96	34.23	3.02	4	10.93***
Psychological symptoms	17.73	3.05	16.36	2.07	3	4.54***
Overall	55.43	5.68	50.06	4.54	4	8.87***

\*- $P<0.05$ , significant and \*\*- $P<0.01$  & \*\*\*- $P<0.001$ , highly significant

**Table 2**  
**Effects of Acupressure on Dysmennorrhoea among Adolescent Girls In Between Pretest and Post Test 3<sup>rd</sup> of Experimental Group N=30**

	Experimental group				Difference Mean %	't'-value
	Pretest		Posttest 3 <sup>rd</sup>			
	Mean	SD	Mean	SD		
Physiological symptoms	37.07	3.96	24.56	2.41	16	27.71***
Psychological symptoms	17.73	3.05	13.08	1.52	8	9.00***
Overall	55.43	5.68	38.37	3.01	13	23.17***

\*-P<0.05, significant and \*\*-P<0.01 &\*\*\*-P<0.001, highly significant

4. The study showed that the posttest 3<sup>rd</sup> overall symptoms mean score 53.22 in control group and 38.37 in experimental group, then SD= 7.53, 3.01 respectively. The obtained unpaired “t” test value is 10.03\*\*\* highly significant at (p<0.001). It revealed that there was significant difference on the effectiveness of acupressure between control and experimental group.

**Table 3: Difference between Posttest 3<sup>rd</sup> Level of Dysmennorrhoea among Adolescent Girls in Control and Experimental Group N=60**

	Control group Posttest 3 <sup>rd</sup>		Experimental Posttest 3 <sup>rd</sup>		Difference mean %	't'- value
	Mean	SD	Mean	SD		
	Physiological symptoms	34.57	6.07	24.56		
Psychological symptoms	18.67	2.99	13.08	1.52	10	7.93***
Overall	53.22	7.53	38.37	3.01	12	10.03***

\*-P<0.05, significant and \*\*-P<0.01& \*\*\*-P<0.001, highly significant

5. The chi square value at p<0.05 level, there is no significant association between the selected demographic variable and posttest level of dysmennorrhoea among adolescent’s girls in experimental and control group.

## V. Conclusion

The study result concluded that,

- ✓ Acupressure (SP6) technique could reduce the severity of dysmennorrhoea symptoms among adolescent girls.
- ✓ There was a significant difference between the experimental and control group level of dysmennorrhoea in posttest 3<sup>rd</sup> score.
- ✓ There was no significant association between selected demographic variables in experimental and control group.

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