



A Study To Evaluate The Effects Of Acupressure On Menstrual Pain, Among Girls With Primary Dysmenorrhea In Renaissance University Indore.

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ABSTRACT: Primary dysmenorrhea is a common condition among adolescent girls, characterized by painful menstruation without underlying pathology. Non-pharmacological methods like acupressure are gaining attention due to their minimal side effects. The main Objective is To evaluate the effects of acupressure on menstrual pain among girls with primary dysmenorrhea in Renaissance University, Indore. Methods is A quasi-experimental one-group pre-test post-test design was adopted. A total of 20 adolescent girls aged 18–25 years, diagnosed with primary dysmenorrhea, were selected using purposive sampling. The Numerical Pain Rating Scale (NPRS) was used to assess menstrual pain levels before and after the intervention. Acupressure was applied to SP6 (Spleen 6) and ST36 (Stomach 36) points on both legs for 5 minutes, twice a day, for the first two days of menstruation. The mean pain score on the pre-test was significantly higher than the post-test score, indicating a reduction in pain after acupressure. Statistical analysis using paired t-test showed a significant difference in pain scores ($p < 0.05$).

BACKGROUND OF THE STUDY:

Menstrual pain, also known as dysmenorrhea, is a common gynecological condition that affects a significant proportion of adolescent girls and young women. Primary dysmenorrhea, which occurs in the absence of any underlying medical condition, is characterized by cramping pain in the lower abdomen that often begins just before or during menstruation. It can be accompanied by nausea, fatigue, headaches, and emotional distress, leading to a negative impact on daily activities, academic performance, and overall quality of life. Various treatment options are available for managing menstrual pain, including nonsteroidal anti-inflammatory drugs (NSAIDs), hormonal therapy, and lifestyle modifications. However, concerns about side effects, accessibility, and personal preferences have led to an increasing interest in alternative and non-pharmacological approaches. Acupressure, a traditional Chinese medicine technique that involves applying pressure to specific points on the body, is gaining attention as a potential method for relieving dysmenorrhea. It is believed to enhance blood circulation, reduce muscle tension, and promote the release of endorphins, which help alleviate pain.

NEED FOR THE STUDY:

Primary dysmenorrhea, or painful menstruation without an underlying medical condition, is a common issue among adolescent girls and young women. It can significantly impact daily activities, academic performance, and overall quality of life. Many individuals rely on painkillers, which may have side effects with long-term use. Therefore, exploring alternative, non-pharmacological interventions like acupressure is essential. Acupressure, a traditional technique based on the principles of acupuncture, involves applying pressure to specific points on the body to relieve pain and improve overall well-being. Several studies suggest that acupressure may help reduce menstrual pain by enhancing blood circulation, relaxing muscles, and balancing hormonal levels. However, there is still a need for further empirical research to establish its effectiveness.

OBJECTIVES:

1. To assess the severity of menstrual pain before and after acupressure treatment.
2. To compare the pain relief provided by acupressure with other pain management methods.
3. To determine the duration of pain relief following acupressure application.
4. To evaluate the impact of acupressure on associated symptoms such as nausea, fatigue, and mood changes.

AIM OF STUDY:

The aim of this study is to evaluate the effects of acupressure on menstrual pain among girls with primary dysmenorrhea. And to determine whether acupressure can effectively reduce the intensity and duration of menstrual pain, improve overall well-being.

HYPOTHESIS:

H0 - There will be no significant difference effect the severity of menstrual pain before and after acupressure treatment.

H1 - There will be significant difference effect the severity of menstrual pain before and after acupressure treatment.

REVIEW OF LITERATURE:

- Harel (2020) reported that 50-90% of adolescent girls experience dysmenorrhea, with 10-20% experiencing severe pain that disrupts normal activities.
- Gagua et al. (2021) found that primary dysmenorrhea is linked to increased school absenteeism, decreased concentration, and emotional distress.
- Smith et al. (2022) found that while NSAIDs are effective in reducing pain, long-term use can cause gastric irritation, nausea, and other side effects.
- Dawood (2021) noted that hormonal treatments help regulate menstrual cycles but may lead to hormonal imbalances, mood changes, and weight gain.

Methodology:

Research Design: Quasi-experimental (one-group pre-test post-test design)

Setting: Renaissance university

Sample Size: 20 adolescent girls

Sampling Technique: Purposive sampling

Inclusion Criteria: Girls aged 18–25 years

Diagnosed with primary dysmenorrhea

Willing to participate

Exclusive criteria:

Who are not willing to participate

Out of the university girls

Tool: Numerical Pain Rating Scale (NPRS): A 0–10 scale where 0 = no pain and 10 = worst possible pain.

Procedure:

Pre-Test: Pain levels were recorded during menstruation (before acupressure).

Intervention: Acupressure was applied at the **SP6 (spleen-6)** **SP36 (stomach 36)** point on both legs for 5 minutes, twice a day, for the first two days of menstruation.

Post-Test: Pain levels were assessed again on the second day after the intervention.

Data Analysis

Section I: Socio-Demographic Profile of Participants

Variable	Categories	Frequency (n=20)	Percentage (%)
Age (in years)	18–19	8	40%
	20–21	7	35%
	22–23	4	20%
	24–25	1	5%
Education	Undergraduate	20	100%
Marital Status	Unmarried	20	100%
Menstrual History	Regular cycles	15	75%
	Irregular cycles	5	25%

During analysis the researcher found that out of 20 people who came to college, 8(40%) people were in age group of (18-19) years, followed by 7(35%) observe in age group (20-21) each were observed in age group of

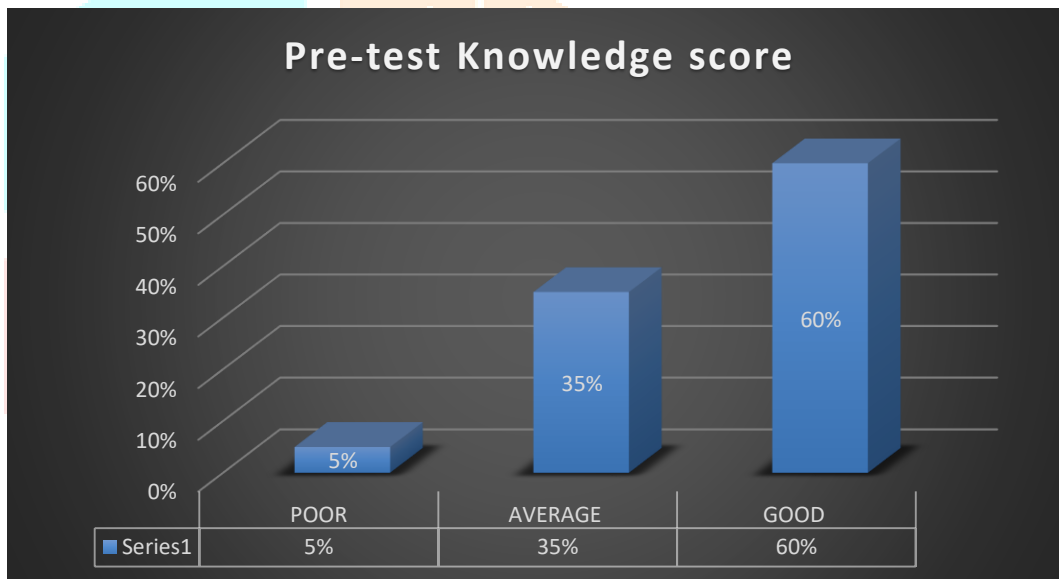
(22-23) year & (24-25) respectively. 20(100%) girls were observe in education (undergraduate)20(100%) people unmarried, 15(75%) girls observed in regular menstrual cycle and 5(25%) girls are observed in irregular menstrual cycle.

2. Categorization of Pain Levels (NPRS Scale):

Category	NPRS Range	Interpretation
Poor	7–10	Severe Pain
Average	4–6	Moderate Pain
Good	0–3	Mild or No Pain

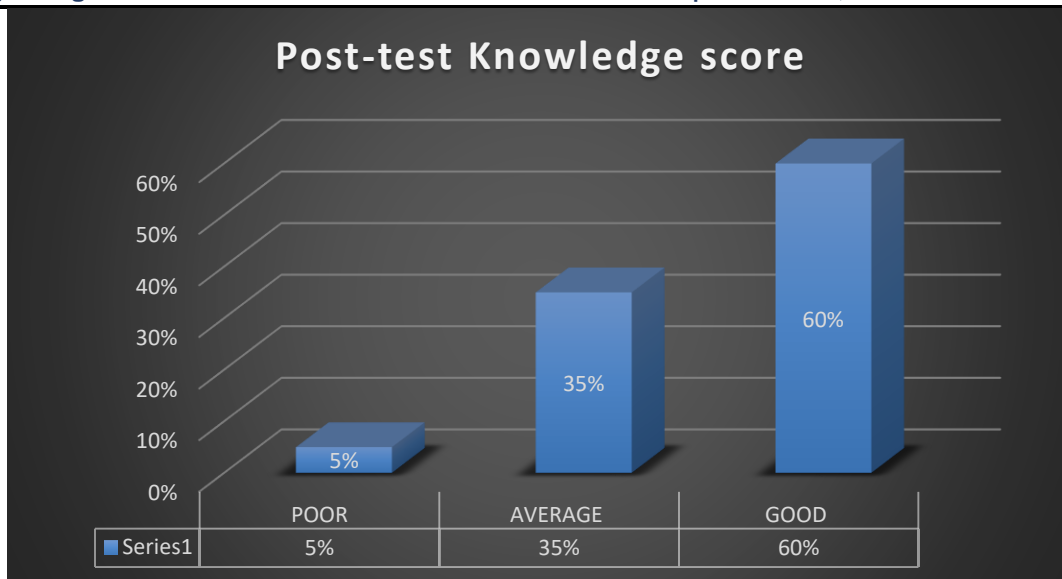
3. Frequency & Percentage Distribution:

Pre-Test Distribution (n = 20): During analysis the researcher found that out of 20 people who come to college, It was highlighted that among 20 sample ,13(65%) of sample had poor, 6(30%) of sample had average & remaining 1(5%) of sample had good knowledge regarding acupressure on menstrual pain.



(Bar Diagram on pre-test knowledge assessment regarding acupressure on menstrual pain)

Post-Test Distribution (n = 20): During analysis the researcher found that out of 20 people who come to college, It was highlighted that among 20 sample ,1(5%) of sample had poor, 7(35%) of sample had average & remaining 12(60%) of sample had good knowledge regarding acupressure on menstrual pain.



(Bar Diagram on post-test knowledge assessment regarding acupressure on menstrual pain)

Section II: Comparison of Pre-Test and Post-Test Pain Scores

Test	Mean	Standard (SD)	Deviation	t-value	p-value
Pre-test Score	7.25	±1.20			
Post-test Score	4.15	±1.04		11.28	< 0.0001

INTERPRETATION: The paired t-test value ($t = 11.28$, $p < 0.0001$) indicates a highly significant reduction in pain after acupressure. The mean pre-test score (7.25) indicates that participants experienced moderate to severe menstrual pain before the intervention. The mean post-test score (4.15) shows that participants experienced mild to moderate pain after the acupressure intervention. The reduction in mean pain score ($7.25 - 4.15 = 3.10$) reflects a clinically meaningful improvement in pain levels. The t-value of 11.28 is much higher than the critical value for 19 degrees of freedom ($df = n-1$), indicating a statistically significant difference between the pre- and post-test scores. The p-value of < 0.0001 is far below the standard alpha level of 0.05.

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