

## Exploring the therapeutic effects of Pinianuga Vidhi and Pathiyam practices on premenstrual syndromes and menstrual cramps in young women: A three-month intervention study

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### Abstract

Premenstrual syndromes (PMS) and menstrual cramps are common issues affecting the quality of life for many women worldwide. Traditional systems of medicine, such as Siddha, offer holistic approaches to address such concerns. Siddha medicine, originating from ancient Tamil Nadu in India, emphasizes the use of natural remedies and lifestyle modifications to maintain health and treat ailments. This study aimed to explore the therapeutic effects of Pinianuga Vidhi, a traditional Siddha practice, combined with Pathiyam dietary and lifestyle modifications, on PMS and menstrual cramps in young women.

Twenty girls aged between 20-25 years experiencing PMS and menstrual cramps were surveyed. They were advised to follow the Pinianuga Vidhi procedure, which involves applying pure gingely oil from toe to head and taking oil baths twice in 8 days, specifically on Tuesday and Friday. Additionally, participants were recommended to adhere to Pathiyam practices, including dietary restrictions such as avoiding non-vegetarian foods, spicy foods, junk foods, and refraining from daytime sleep, heavy exercises, and heavy work. This intervention was followed for a duration of three months.

Results indicated a reduction in menstrual cramps and PMS symptoms in the majority of surveyed girls following the intervention. The holistic approach combining Pinianuga Vidhi and Pathiyam practices from the Siddha system of medicine offers a promising alternative for managing menstrual discomfort and improving overall well-being in young women. Further research is warranted to validate these findings and explore the mechanisms underlying the therapeutic effects of Siddha interventions on menstrual health.

**Keywords:** Siddha medicine; Premenstrual syndrome (PMS); Menstrual cramps; Oil bath therapy; Traditional remedies; Women's health

### 1. Introduction

The Siddha system of medicine, originating from ancient Tamil Nadu in India, is one of the oldest traditional healthcare systems practiced in South Asia<sup>1</sup>. Siddha medicine is based on the principles of Ayurveda and has a rich history of utilizing natural remedies, dietary modifications, and lifestyle practices to maintain health and treat various ailments<sup>2</sup>. Central to Siddha medicine is the concept of balance and harmony within the body, achieved through the integration of physical, mental, and spiritual well-being<sup>3</sup>. This holistic approach emphasizes personalized treatments tailored to individual constitutions and aims to address the root causes of diseases rather than merely alleviating symptoms<sup>4</sup>.

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Premenstrual syndromes (PMS) and menstrual cramps are common gynecological issues affecting women worldwide<sup>5</sup>. PMS refers to a cluster of physical, emotional, and behavioral symptoms that occur cyclically during the luteal phase of the menstrual cycle, while menstrual cramps, or dysmenorrhea, are characterized by pelvic pain and discomfort associated with menstruation<sup>6</sup>. These conditions can significantly impact women's quality of life, leading to decreased productivity, impaired social functioning, and psychological distress<sup>7</sup>.

Traditional systems of medicine, such as Siddha, offer alternative approaches to managing PMS and menstrual cramps<sup>8</sup>. Siddha therapies often include herbal remedies, therapeutic massages, and lifestyle modifications aimed at restoring hormonal balance, improving circulation, and alleviating pain<sup>9</sup>. Pinianuga Vidhi is a traditional Siddha practice that involves taking oil baths using pure gingely oil, which is believed to have therapeutic effects on various health conditions<sup>10</sup>. Additionally, Pathiyam, a dietary and lifestyle regimen prescribed in Siddha medicine, emphasizes the consumption of specific foods and avoidance of certain activities during menstruation to maintain hormonal equilibrium<sup>11</sup>.

Despite the historical use of Siddha interventions for women's health issues, there is limited scientific evidence supporting their efficacy in managing PMS and menstrual cramps. Therefore, this study aimed to investigate the therapeutic effects of Pinianuga Vidhi combined with Pathiyam practices on PMS and menstrual cramps in young women. By employing a holistic approach rooted in the principles of Siddha medicine, this research seeks to provide valuable insights into alternative treatments for menstrual discomfort and promote women's overall well-being.

The aim of this study is to explore the therapeutic effects of Pinianuga Vidhi combined with Pathiyam practices from the Siddha system of medicine on premenstrual syndromes and menstrual cramps in young women.

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## 2. Materials and Methods

### 2.1. Study Design

This study employed a prospective interventional design to investigate the therapeutic effects of Pinianuga Vidhi combined with Pathiyam practices on premenstrual syndromes (PMS) and menstrual cramps in young women aged between 20-25 years. The study duration was set for three months to assess the sustained impact of the intervention on menstrual symptoms.

### 2.2. Participant Recruitment

A total of 20 women experiencing PMS and menstrual cramps were recruited from the local community through advertisements and word-of-mouth referrals. Inclusion criteria comprised women aged 20-25 years with regular menstrual cycles and a history of experiencing moderate to severe PMS symptoms and menstrual cramps. Participants with a history of chronic medical conditions, hormonal disorders, or pregnancy were excluded from the study.

### 2.3. Intervention

Participants underwent an intervention protocol consisting of Pinianuga Vidhi oil baths and adherence to Pathiyam practices as prescribed in Siddha literature. Pinianuga Vidhi involved taking oil baths twice a week, specifically on Tuesdays and Fridays. Participants applied pure gingely oil from head to toe and allowed it to sit for 20 minutes before bathing in lukewarm water. Medicated shampoos were avoided, and participants used araiyu or shikakai powder as alternatives. Pathiyam practices included dietary modifications such as refraining from consuming non-vegetarian foods, spicy foods, junk foods, and restricting daytime sleep, heavy exercises, and heavy work during menstruation.

### 2.4. Data Collection

Baseline assessments of PMS symptoms and menstrual cramps were conducted using standardized questionnaires. Participants were instructed to record the severity of their symptoms using visual analog scales (VAS) at baseline and monthly intervals throughout the study duration. Additionally, participants were interviewed to collect demographic information and medical history at the beginning of the study.

### 2.5. Outcome Measures

The primary outcome measures included changes in the severity of PMS symptoms and menstrual cramps assessed using VAS scores. Secondary outcome measures included participant-reported improvements in overall well-being, menstrual regularity, and adherence to the intervention protocol.

## 2.6. Statistical Analysis

Descriptive statistics were used to summarize participant characteristics and baseline data. Changes in outcome measures over time were analyzed using repeated measures analysis of variance (ANOVA) or non-parametric tests, as appropriate. Statistical significance was set at  $p < 0.05$ .

## 2.7. Ethical Considerations

Informed consent was obtained from all participants before enrollment, and measures were taken to ensure participant confidentiality and data privacy throughout the study.

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## 3. Results

The results of the study are summarized in Table 1 and Table 2.

All participants experienced a reduction in the severity of menstrual cramps over the three-month study period, with the mean VAS score decreasing from 8.5 at baseline to 2.5 at the end of 3 months.

Significant difference observed compared to baseline ( $p < 0.05$ ).

The tables illustrate the changes in the severity of premenstrual symptoms (PMS) and menstrual cramps over the three-month study period. Mean Visual Analog Scale (VAS) scores were recorded at baseline, monthly intervals, and at the end of three months to assess the participants' symptoms. The data indicate a trend of decreasing symptom severity over time, with a significant difference observed at the end of three months compared to baseline, suggesting a potential therapeutic effect of the intervention.

These findings suggest that the combination of Pinianuga Vidhi oil baths and Pathiyam practices may lead to significant improvements in PMS symptoms and menstrual cramps in young women. However, further analysis and interpretation of the results are warranted to draw definitive conclusions regarding the efficacy of the intervention.

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## 4. Discussion

The present study investigated the efficacy of Pinianuga Vidhi oil baths combined with Pathiyam practices in alleviating premenstrual symptoms (PMS) and menstrual cramps in young women. The findings revealed a significant reduction in symptom severity over the three-month study period, indicating the potential benefits of the intervention.

The observed improvements in PMS and menstrual cramps align with previous studies that have examined the effects of traditional remedies and lifestyle modifications on menstrual health. For instance, a study by Sharma et al. demonstrated that the use of herbal formulations and dietary modifications resulted in a significant reduction in PMS symptoms among women<sup>12</sup>. Similarly, Gupta et al. reported a decrease in menstrual pain severity following the adoption of Ayurvedic interventions and dietary restrictions<sup>13</sup>.

**Table 1** Changes in Severity of Premenstrual Symptoms (PMS) Over Time

Time Point	Mean VAS Score for PMS Symptoms
Baseline	7.8
1 month	6.2
2 months	4.5
3 months	3.2

The combination of Pinianuga Vidhi oil baths and Pathiyam practices may exert beneficial effects on menstrual health through multiple mechanisms. The application of gingely oil in the prescribed manner may promote relaxation and alleviate muscle tension, thereby reducing the severity of menstrual cramps. Additionally, adherence to Pathiyam guidelines, including dietary modifications and lifestyle changes, may help regulate hormonal imbalances and improve overall well-being.

The results of the current study underscore the potential of integrative approaches, combining traditional remedies with lifestyle modifications, in managing menstrual disorders. However, it is essential to acknowledge the limitations of the study, including the small sample size and lack of a control group. Future research with larger sample sizes and rigorous study designs is warranted to validate the findings and elucidate the underlying mechanisms of action.

**Table 2** Changes in Severity of Menstrual Cramps Over Time

Time Point	Mean VAS Score for Menstrual Cramps
Baseline	8.5
1 month	6.9
2 months	4.8
3 months	2.5

## 5. Conclusion

In conclusion, the present study provides preliminary evidence supporting the efficacy of Pinianuga Vidhi oil baths and Pathiyam practices in reducing PMS symptoms and menstrual cramps. Integrative approaches incorporating traditional remedies and lifestyle modifications offer promising avenues for improving menstrual health outcomes in young women.

## Compliance with ethical standards

### *Disclosure of conflict of interest*

No conflict of interest to be disclosed.

### *Statement of informed consent*

Informed consent was obtained from all individual participants included in the study.

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