Original Article

Effects of SP6 Acupressure on Labor Pain During Childbirth Among Nulliparous Women: A Randomized Clinical Trial

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Abstract

Background: Acupressure is a nonpharmacological therapeutic technique that involves applying pressure to specific body points to promote energy flow and relieve pain. This study evaluated the effect of Sanyinjiao (SP6) acupressure on labor pain among nulliparous women. **Materials and Methods:** A randomized clinical trial was conducted between January and March 2023 in the labor and maternity wards of a tertiary care hospital in Sikkim, India. Sixty nulliparous women at 37–42 weeks of gestation with at least three contractions in 10 minutes were randomly assigned to an intervention group (n = 30) or a control group (n = 30). The control group received routine obstetric care, while the intervention group received SP6 acupressure for two minutes during each contraction for 30 minutes, starting at 4 cm and continuing until 8 cm cervical dilatation. Labor pain was assessed seven times using the visual analogue scale (VAS). The collected data were analyzed using one-way analysis of variance (ANOVA), repeated-measures ANOVA, and analysis of covariance (ANCOVA). **Results:** No significant difference was observed in the baseline pain scores between the groups ($F_{1,58} = 0.12$, $p > 0.05$). Repeated-measures ANOVA showed a significant reduction in pain intensity in the intervention group at 4 cm ($F_{1,58} = 88.67$, $p < 0.001$) and 6 cm dilation ($F_{1,58} = 305.4$, $p < 0.001$). ANCOVA confirmed significant differences between the groups across seven measurements ($F_{1,58} = 117.20$, $p < 0.05$). **Conclusions:** SP6 acupressure demonstrated a positive effect on pain intensity and was a safe, noninvasive, and cost-effective method for reducing labor pain among nulliparous women. Therefore, it can be recommended as a supportive midwifery practice alongside routine obstetric care.

Keywords: *Acupressure, delivery, labor pain, labor stage, obstetric, parity, parturition, pregnancy*

Introduction

Labor provides a highly complex experience to women that varies considerably from one to another and is influenced by various physiological, psychological, and social factors. Childbirth is often regarded as a fulfilling event, yet the labor pain is consistently described as one of the most severe types of pain encountered in one's life. It is either comparable to or exceeds the rest of the painful conditions experienced by human beings.[1-3] Despite its intensity, many women later recall this painful experience as a positive one, largely because of the outcome, i.e., a healthy newborn.[4,5] Therefore, effective pain management is an essential component in midwifery care. Pharmacological methods, such as epidural analgesia, are highly effective in pain management in spite of its association with adverse effects for both the mother and the fetus.[6] Consequently, nonpharmacological approaches are increasingly recommended in recent years, thanks to its affordability, safety, and its role in enhancing the maternal satisfaction without medical risks.[7,8] Some of the common nonpharmacological methods used for labor pain management include massage, col or heat application, hydrotherapy, aromatherapy, mental imagery, relaxation techniques, effleurage, bladder emptying, and acupressure.[9-11] These methods may help in reducing the pain, shortening the duration of the labor, and alleviating the anxiety levels by stimulating the competing sensory pathways and modulating the central nervous system's responses to painful uterine contractions.[12,13] Among these approaches, the acupressure technique is focused in this study. It is a simple, noninvasive, and cost-effective technique derived from traditional Chinese medicine. In this technique, pressure is applied at

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specific points in the body rather than needles, used in acupuncture technique.[14]

Several acupoints have been explored in obstetric practice, such as BL60 (Kunlun), BL67 (Zhiyin), GB21 (Jianjing), LI4 (Hegu), SP9 (Yinlingquan), SP8 (Diji), and SP6 (Sanyinjiao). These points have been established in the literature to regulate uterine contractions, enhance cervical dilation, and reduce pain perception through hormonal and neurophysiological mechanisms.[7,15,16] Among these acupoints, the SP6 point is particularly significant in gynecology and obstetrics. Located on the medial side of the lower leg, SP6 is commonly used to augment the labor, reduce irregular contractions, alleviate cervical resistance, and diminish the labor pain.[17] Evidences suggest that the acupressure at SP6 acupoint may influence the release of oxytocin, endorphins, and cortisol, thereby reducing the maternal stress responses and improving the labor outcomes.[18,19] The findings across the studies remain inconsistent, i.e., a few studies report significant reduction in pain and shortened first-stage labor, whereas others show only modest or inconclusive effects.[20,21]

This inconsistency highlights an important research gap that needs to be addressed. Despite its potential benefits, acupressure, particularly at SP6, has not been extensively studied in the context of Indian gynecology practices, where many women face limited access to pharmacological pain relief. Furthermore, a considerable proportion of laboring women, under low-resource settings, receive no pain management support, thus exacerbating anxiety, prolonging the labor, and increasing their maternal distress.[22] Since acupressure is a low-cost, safe, and feasible technique for midwives to implement, it represents a practical alternative for improving the labor experience in such settings.[23] Therefore, this study was conducted to evaluate the effectiveness of SP6 acupressure in reducing pain during active phase of labor among nulliparous women, admitted at a tertiary care hospital in Sikkim. By addressing this clear research gap in the existing evidence and focusing on a noninvasive, culturally adaptable method, the aim of this research is to contribute practical insights into maternal pain management strategies that are suitable for low-resource settings. Therefore, the objective of this study is to determine the effects of SP6 acupressure on labor pain during childbirth among nulliparous women through a randomized clinical trial.

Materials and Methods

This randomized clinical trial (CTRI/2023/07/055059) was conducted between January and March 2023 at the labor and maternity wards belonging to the Department of Obstetrics and Gynecology, Sikkim Manipal Institute of Medical Sciences, Sikkim Manipal University, Sikkim, India. The aim is to examine the effect of SP6 acupressure on labor pain among nulliparous women. A total of 60 nulliparous women aged between 19 and 35 years, with singleton pregnancies at 37–42 weeks' gestation, cephalic presentation, and intact skin at bilateral SP6 points, were recruited. The selected study participants were admitted in active labor and matched by their gestational age, cervical dilation, and labor stage. The inclusion criteria comprised nulliparous women with normal term pregnancies who provided informed consent to participate in the study. The exclusion criteria included the use of analgesics (Epidosin, Drotin, Tab Misoprost), threatened abortion, pregnancy following infertility treatment, indications for cesarean section (such as placental abruption or meconium-stained amniotic fluid), the presence of severe medical or psychiatric illness, or the use of anesthetic gases. For this study, the sample size was calculated using G*Power version 3.1.9.2. Based on the data from a previous study on SP6 acupressure, the parameters included are as follows; $\alpha = 0.05$, power $(1–\beta) = 0.80$, standard deviation (SD) =1.4, mean baseline pain score (M0) = 7.2, and a 10% expected dropout. The required sample was calculated to be 30 women per group.[24] The study participants were grouped into intervention ($n = 30$) and control ($n = 30$) groups using a closed-envelope method based on their admission codes. A pilot study was conducted from October 30 to November 5, 2022, with six women (three participants per group) to assess the feasibility of the study. The results confirmed both feasibility and acceptability. The intervention group received bilateral SP6 acupressure. Medium-intensity pressure (5–15 kg) was applied using the index finger following the rapid decompression method during each contraction for about 30 minutes at 4 cm cervical dilation and was repeated at 6 cm dilation. The SP6 point, located four finger-breadths above the medial malleolus posterior to the tibia, was identified according to the meridian theory. The application of standardized pressure was ensured by nail-bed blanching as a visual cue. In case of severe discomfort experienced by the patients, the procedure, i.e., application of pressure, was paused. The control group received routine hospital care without the intervention procedure, i.e., acupressure. A sham or placebo acupressure group was not included, because introducing a sham procedure during active labor could increase the distress and reduce the trust upon the healthcare providers. Applying simulated acupressure without therapeutic intent may have caused unnecessary discomfort or false reassurance among the study participants, who were experiencing severe labor pain then. The trial was designed to evaluate whether SP6 acupressure benefits the patient in addition to their existing routine care under real-life conditions in a low-resource clinical setting and compare it with placebo conditions.

The baseline assessments were conducted upon admission using three structured tools as briefed herewith; Demographic Proforma (10 items): age, religion, educational level, occupation, family type, residence, socioeconomic status, marital age, dietary habits, and lifestyle factors; Obstetric Characteristics

Questionnaire (eight items): gravida, parity, gestational weeks, antenatal check-up frequency, history of dysmenorrhea, age at menarche, last menstrual period, and expected date of delivery; and Baseline Labor Profile (seven items): cervical dilation, effacement, fetal position, frequency of contractions per 10 minutes, intensity of contractions, duration of contractions, and estimated fetal weight. These tools demonstrated high content validity (80–92%) and reliability (intra-rater agreement $r = 1.0$). The intervention group participants received bilateral SP6 acupressure treatment, performed by a trained investigator, under the guidance of an acupressure specialist. The SP6 point, located four finger-breadths above the medial malleolus posterior to the tibia, was stimulated with medium intensity (5–15 kg). At the chosen acupoint, pressure was applied gradually for 30 seconds, maintained for one minute, and then released for 30 seconds in cycles in coordination with the uterine contractions. Each session lasted for approximately 30 minutes, while the interventions were made twice, i.e., first at 4 cm cervical dilation followed by, at 6 cm dilation. Nail-bed blanching was used as a visual cue to standardize the pressure intensity. In case of severe discomfort experienced by the participant, the procedure was paused. However, the control group participants received routine hospital care (monitoring, supportive care, IV access, and pharmacological augmentation, only if clinically required). A sham or placebo acupressure group was not included because the application of simulated pressure during painful labor could cause unnecessary distress. Further, placebo stimulation without therapeutic intent was not ethically justifiable. In addition to this, the trial was designed as a pragmatic evaluation of SP6 acupressure in real-life practice rather than in artificial conditions.

Labor pain intensity was calculated using the Visual Analogue Scale (VAS, 0–10) in which 0 denotes no pain and 10 corresponds to the worst imaginable pain. The VAS scores were recorded seven times at seven time points such as baseline before intervention (VAS 1, VAS 2), immediately after acupressure (VAS 3), 30 minutes later (VAS 4), 60 minutes later (VAS 5), after second intervention at 6 cm (VAS 6), and 60 minutes later at 8 cm dilation (VAS 7). The consistency of cervical dilation assessment was maintained by having a single trained investigator perform all per-vaginal examinations. Fetal heart was monitored in line with the hospital protocol (every 30 minutes during active labor). Three instruments were used for the study, such as the demographic proforma (content validity = 80%), obstetric characteristics checklist (content validity = 84%), and baseline labor profile (content validity = 9 2%). Translation and back-translation of the questionnaires were performed in two languages, such as Hindi and Nepali. Reliability testing was conducted using intra-rater method ($r = 1.0$). Pain measurement with VAS was tested with Cronbach's $\alpha = 0.80$. It is likely that the intervention itself, regardless of its specific type, contributed to the observed results.

The collected data were analyzed using IBM SPSS Statistics for Windows, version 25.0 (IBM Corp., Armonk, NY, USA). Descriptive statistics (mean (SD), frequencies, percentages) and inferential statistics (analysis of variance [ANOVA], analysis of covariance [ANCOVA]) were used. A p value < 0.05 was considered to be statistically significant.

Ethical considerations

This study was approved by the Institutional Ethics Committee of Sikkim Manipal Institute of Medical Sciences (IEC No.: SMIMS/IEC/2022-49; Approval date: May 21, 2022; Registration code: 664/PO/RE/S/02CPCSEA, dated February 16, 2017). Written informed consent was obtained from all the study participants. Both confidentiality and voluntary participation were assured. The study was prospectively registered with the Clinical Trial Registry of India (CTRI/2023/07/055059).

Results

A total of 89 women were assessed for study eligibility, from which 64 were randomized (32 participants for each in intervention and control groups). During the follow-up, four participants were excluded (two due to severe pain in the control group, one due to dissatisfaction, and one due to severe pain in the intervention group) from the study. Thus, 60 participants (30 per group) were included in the final analysis [Figure 1].

Table 1 presents the sociodemographic characteristics of the participants. Both intervention and control groups were comparable in terms of age, religion, employment status, educational level, and the type of family. No statistically significant differences were observed between the groups ($p > 0.05$), thus indicating that randomization successfully produced homogeneous groups. As shown in Table 2, both the groups also demonstrated similarity in obstetric characteristics, including the number of antenatal visits, age at menarche and marriage, gestational weeks, fetal weight, and the use of oxytocin or intravenous fluids ($p > 0.05$). These findings further confirm that the study groups were comparable before their intervention. Table 3 displays the baseline labor profiles of the study participants. The distribution of fetal position, frequency and the intensity of contractions, and other baseline variables showed no significant difference between the groups ($p > 0.05$), thus confirming the baseline equivalence in labor characteristics.

The hour-wise mean pain scores of both the groups are shown in Table 4. The intervention group demonstrated a consistent decline in mean pain scores from the first to the seventh assessment following SP6 acupressure treatment,

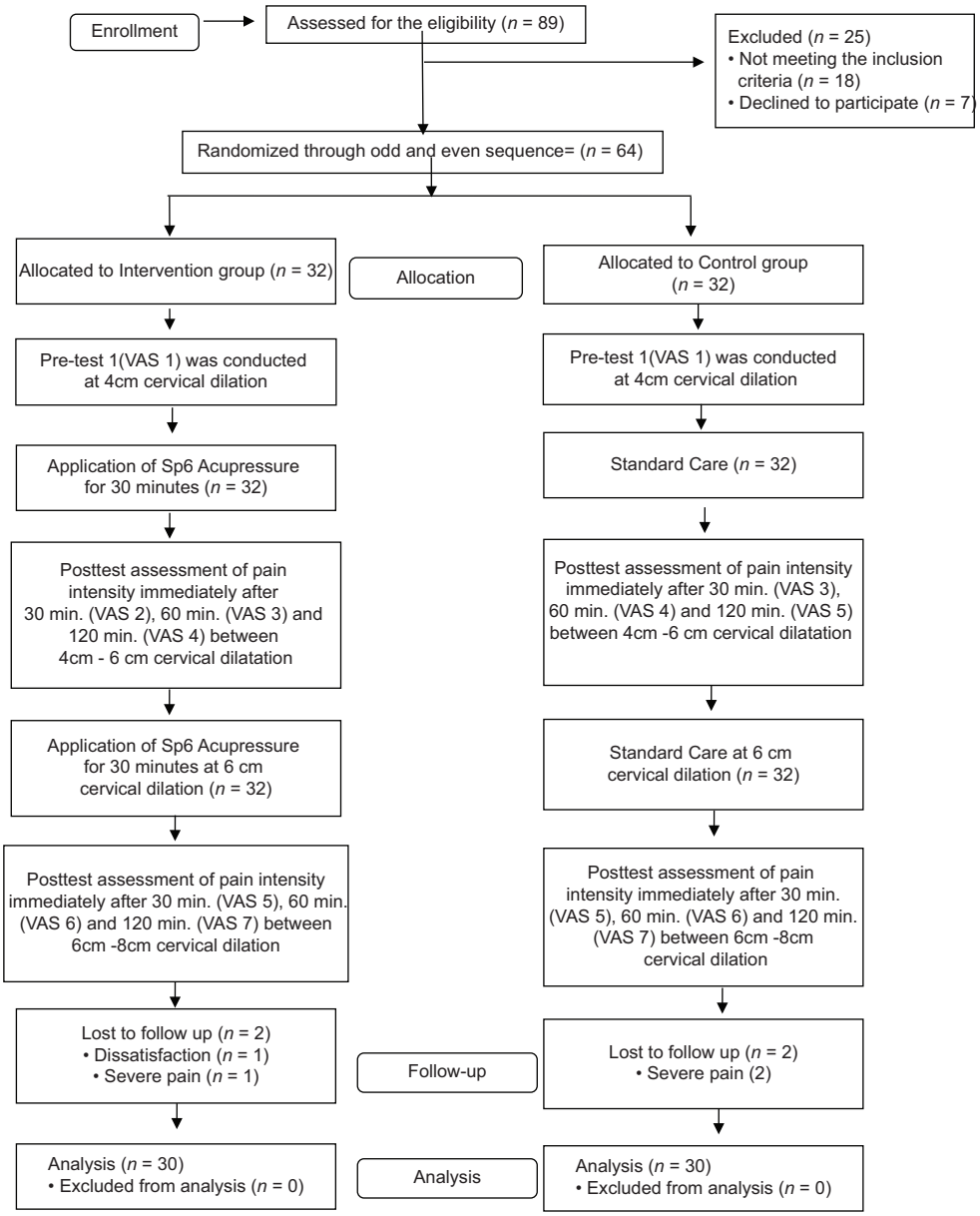

Figure 1: CONSORT flow diagram of the participants in the study

whereas the control group showed a gradual increase in pain intensity throughout the labor. This finding indicates that the SP6 acupressure treatment effectively alleviated labor pain with an increase in the cervical dilation. The results of the ANOVA analysis [Table 5] showed no significant difference between the groups in terms of baseline pain scores (VAS 1, $p > 0.05$). However, from the second measurement (VAS 2) onwards, the mean pain scores were significantly lower in the intervention group than the control group ($p < 0.001$). This finding demonstrates that the SP6 acupressure treatment had a consistent pain-reducing effect across multiple time points.

According to Table 6, the ANCOVA results confirmed statistically significant differences in posttest pain scores between the intervention and control groups after adjusting for pretest scores ($p < 0.001$). This result validates that the SP6 acupressure treatment independently contributes to pain reduction during the active phase of labor among nulliparous women. Overall, the analytical results indicate that "SP6 acupressure" is an effective, noninvasive, and a safe method for reducing the labor pain intensity than the standard obstetric care rendered to nulliparous women.

Discussion

The findings of this study indicate that SP6 acupressure treatment significantly reduces the pain intensity during the active phase of labor among nulliparous women. The pain scores of the intervention group participants experienced a steady decline, whereas the control group participants

Table 1: Comparison of obstetric characteristics in the intervention and control groups *n*=60, *n*=30

Demographic variables	Intervention group			Control group		Remarks
	n (%)	Fisher's exact	*p**	*n* (%)	*p**	*p*>0.05*
Age in years						
a. 19–25 years	30	1.61	0.90	33	0.21	*p*>0.05
b. 26–30 years	53			37		
c. 31–35 years	17			30		
Religion						
a. Hindu	37	8.77	0.31	47	0.29	*p*>0.05
b. Muslim	17			23		
c. Buddhist	33			13		
d. Christian	10			17		
Employment status						
a. Homemaker	30	7.32	0.25	54	0.30	*p*>0.05
b. Self-employed	27			13		
c. Casual wage laborer	23			10		
d. Regular salaried employed	20			23		
Habitat						
a. Urban area	57	3.52	0.17	47	0.23	*p*>0.05
b. Rural area	43			53		
Educational qualification						
a. No formal education	40	7.32	0.25	24	0.30	*p*>0.05
b. Primary school	–			23		
c. Middle school	20			30		
d. High school	23			10		
e. Intermediate or post high school	–			3		
f. Graduate and above	17			10		
Type of family						
a. Nuclear	67	1.80	0.50	50	0.24	*p*>0.05
b. Joint	33			50		
Dysmenorrhea history						
a. Mild pain	40	1.28	0.94	33	0.49	*p*>0.05
b. Moderate pain	30			50		
c. Severe pain	30			17		

*Fisher's exact test

experienced an increase in their pain intensity during the same period.[18,19] These results agree with earlier studies, which confirmed that the stimulation of SP6 point can effectively relieve labor pain and improve maternal comfort.[16,20,25]

Several studies have reported similar findings; for instance, Yesilcicek and Kiymet found that SP6 acupressure significantly reduces the pain levels and shortens the first stage of labor compared with the routine care.[7] Ashtarkan also found that the acupressure, given at SP6 and SP8 points, reduces both intensity and the duration of labor pain.[16] Likewise, Shirdel and colleagues reported that SP6 stimulation improves maternal pain tolerance and satisfaction during labor.[26] The similarity between the results of these studies and the present one might be attributed to the comparable intervention timing, sample characteristics, and consistent pressure techniques, all of which would have activated the endorphin release and promoted uterine relaxation.

However, some studies have shown conflicting results as well. For instance, Munevver and Fusun compared acupressure and massage therapies and found that massage alone heavily reduces the pain, though a combination of both methods was highly effective than its independent application.[27] Such differences could be attributed to variations in study design, frequency and intensity of pressure, and cultural perceptions of touch during childbirth. However, some studies were conducted in high-resource settings where pharmacological pain relief was also available, which might have influenced the perception about pain and the reporting practices. Additionally, the variations in practitioner's skills and the consistency of acupressure application could contribute to differing results.[28] In 2024, a study found that ice massage at the SP6 point reduces labor pain, increases the comfort, and reduces the anxiety levels. So, the study suggested that a combination of ice massage and acupressure may have a synergistic effect[29-31] in labor pain management. The differences in these findings

Table 2: Comparison of obstetric characteristics in the intervention and control groups *n*=60, *n*=30

Obstetric characteristics	Intervention group (*n*=30)			Control group (*n*=30)			Remarks
	n (%)	Fisher's exact	*p**	*n* (%)	Fisher's exact	*p**	*p*>0.05*
No. of antenatal checkups							
a. 1–4 times	20	2.76	0.68	13	2.60	0.71	*p*>0.05
b. 5–8 times	57			60			
c. >8 times	23			27			
Age at menarche							
a. 10–13 years	67	0.83	0.68	70	4.04	0.15	*p*>0.05
b. 14–17 years	33			30			
Age at marriage							
a. 18–24	30	1.61	0.90	37	4.34	0.39	*p*>0.05
b. 25–29	53			40			
c. 30–34	17			23			
Gestational weeks							
a. 37–39 weeks	47	2.05	0.44	57	3.37	0.16	*p*>0.05
b. 40–42 weeks	53			43			
Estimated fetal weight							
a. 2.5 kg–3.5 kg	57	0.35	0.89	57	0.16	1.00	*p*>0.05
b. 3.5 kg–4.5 kg	43			43			
Administration on Inj. Oxytocin							
a. No	57	1.82	0.40	67	1.82	0.40	*p*>0.05
b. Yes	43			33			
Administration of fluid							
a. No	30	1.47	0.58	37	5.81	0.05	*p*>0.05
b. Yes	70			63			

*Fisher's exact test

Table 3: Comparison of baseline labor profile in the intervention and control groups *n*=60, *n*=30

Baseline labor profile	Intervention group			Control group			Remarks
	n (%)	Fisher's exact	*p**	*n* (%)	Fisher's exact	*p**	*p*>0.05*
Position of the fetus							
a. Left Occipito-Anterior (LOA)	83	2.34	0.38	80	2.65	0.35	*p*>0.05
b. Right Occipito-Anterior (ROA)	17			20			
No. of contractions							
a. 1–3 times/10 mins	33	0.64	0.88	10	1.02	1.00	*p*>0.05
b. 4–7 times/10 mins	67			90			
Intensity of the contractions							
a. <20 secs	57	8.48	0.06	60	2.21	0.84	*p*>0.05
b. 20–40 secs	13			13			
c. >40 secs	30			27			

*Fisher's exact test

could be attributed to variations in study design, sample size, and methodologies.

The discrepancies across the studies can also be explained by differences in sample characteristics, setting, and application protocols. In the present study, the participants were nulliparous women, recruited for the study from a low-resource setting, i.e., from a tertiary hospital in Sikkim, India, where the availability of pharmacological analgesia was limited. In contrast, the studies conducted in technologically advanced centers often combine acupressure with other supportive measures, resulting in different outcome magnitudes.[18,19] Thus, the study setting plays a critical role in determining the overall impact of nonpharmacological interventions.

From the researcher's perspective, the observed reduction in labor pain may be explained by both physiological and psychological mechanisms. Physiologically, the pressure applied at SP6 acupoint stimulates the sensory nerve endings that modulate the transmission of pain impulses to the brain and increases the secretion of endorphins, which are natural

Table 4: Hour-wise assessment of mean score of pain in intervention group and control group *n*=60, *n*=30

Hour of assessment	Group	Pretest score	Posttest score	Mean (SD)	
				Pretest	Posttest
Pretest I—VAS 1 (4 cm)	Experimental	246	–	8.24 (0.62)	–
	Control	242	–	7.93 (1.43)	–
Posttest I—VAS 2 (30 mins after 4 cm)	Experimental	–	235	–	7.80 (0.68)
	Control	–	252	–	8.37 (0.62)
Posttest II—VAS 3 (60 mins after 4 cm)	Experimental	–	223	–	7.41 (0.55)
	Control	–	253	–	8.41 (0.50)
Pretest II/Posttest III VAS 4 (120 mins after 4 cm)	Experimental	223	212	7.41 (0.55)	7.02 (0.72)
	Control	253	258	8.41 (0.50)	8.55 (0.49)
Posttest IV—VAS 5 (30 mins after 6 cm)	Experimental	–	202		6.71 (0.44)
	Control	–	260		8.65 (0.47)
Posttest V—VAS 6 (60 mins after 6 cm)	Experimental	–	191		6.34 (0.48)
	Control	–	261	–	8.68 (0.46)
Posttest VI—VAS 7 (120 mins after 6 cm)	Experimental	–	179	–	5.94 (0.54)
	Control	–	263	–	8.74 (0.67)

Values are expressed as mean (SD). VAS=Visual analogue scale. Statistical significance: $p<0.05$ (*), $p<0.01$ (**), $p<0.001$ (***)

Table 5: ANOVA to evaluate the VAS 1, VAS 2, VAS 3, VAS 4, VAS 5, VAS 6, and VAS 7 pain levels between the nulliparous women in the intervention and control groups *n*=60, *n*=30

Test		Sum of squares	Mean square	*F*	df	*p*
VAS 1 (at 4 cm)	Between groups	0.26	0.26	0.12	1	0.728
	Within groups	126.66	2.18		58	
	Total	126.93			59	
VAS 2 (30 mins after 4 cm)	Between groups	4.81	4.81	11.01	1	0.002*
	Within groups	25.36	0.43		58	
	Total	30.18			59	
VAS 3 (60 mins after 4 cm)	Between groups	15.00	15.00	51.99	1	0.001*
	Within groups	16.73	0.28		58	
	Total	31.73			59	
VAS 4 (120 mins after 4 cm)	Between groups	35.26	35.26	88.67	1	0.001*
	Within groups	23.06	0.39		58	
	Total	58.33			59	
VAS 5 (30 mins after 6 cm)	Between groups	56.06	56.06	259.45	1	0.001*
	Within groups	12.53	0.21		58	
	Total	68.60			59	
VAS 6 (60 mins after 6 cm)	Between groups	81.66	81.66	357.03	1	0.001*
	Within groups	13.26	0.22		58	
	Total	94.93			59	
VAS 7 (120 mins after 6 cm)	Between groups	117.60	117.60	305.40	1	0.001*
	Within groups	22.33	0.38		58	
	Total	139.93			59	

ANOVA=Analysis of variance. Statistical significance: $p<0.05$ (*), $p<0.01$ (**), $p<0.001$ (***)

pain inhibitors.[14,15] Psychologically, this intervention gives women a sense of involvement and control during labor, thereby decreasing their anxiety levels and enhancing their coping capacity. This dual effect may explain the consistent pain reduction pattern observed among the intervention group participants across the posttest assessments.

On the practical side, SP6 acupressure is a simple, safe, and cost-effective intervention that can be incorporated into routine midwifery care. Training nurses and midwives could enhance labor management through this technique, particularly in low-resource settings, where access to epidural or pharmacological analgesia is limited.[6,17,19] The integration of SP6 acupressure therapy into maternity care may improve maternal satisfaction, reduce the fear of childbirth, and potentially decrease unnecessary caesarean requests motivated by pain concerns.

One of the major strengths of this study is its utilization of a well-defined intervention protocol and a control

Table 6: ANCOVA to compare the differences in scores of labor pain between groups of SP6 acupressure in intervention and control *n*=60, *n*=30

Source	Type III sum of squares	Mean square	ANCOVA *F*	df	*p*	Partial eta squared
By controlling pretest (VAS 1)						
VAS 2 (Posttest 1)	4.90	4.90	11.10	1	0.002	0.16
VAS 3 (Posttest 2)	14.85	14.85	50.90	1	0.001	0.47
VAS 4 (Posttest 3)	35.94	35.94	96.65	1	0.001	0.62
By controlling posttest 3 (VAS 4)						
VAS 5 (Posttest 4)	21.36	21.36	97.26	1	0.001	0.63
VAS 6 (Posttest 5)	31.07	31.07	133.72	1	0.001	0.70
VAS 7 (Posttest 6)	45.91	45.91	117.20	1	0.001	0.67

ANCOVA=Analysis of covariance; adjusted for baseline (VAS 1/VAS 4 as applicable). Statistical significance: $p<0.05$ (*), $p<0.01$ (**), $p<0.001$ (***)

group, which automatically enhances the reliability of the findings. Additionally, the inclusion of multiple posttest measurements allowed for the assessment of temporal effects of SP6 acupressure on labor pain.[18,20]

Despite its strengths, this study has certain limitations. The sample size was relatively small and confined to a single tertiary care hospital, which may limit the generalizability of the findings. The study included only nulliparous women; therefore, the results cannot be extended to multiparous women. Additionally, blinding was not feasible due to the nature of the intervention, which may have introduced response bias. The effects of SP6 acupressure were assessed only during the active phase of labor, and long-term maternal or neonatal outcomes were not evaluated. So, the future studies are recommended with a large sample size and multiple assessments across different labor stages to confirm these study findings.[18,20,25]

Conclusion

This study suggests that the SP6 acupressure treatment at the SP6 point may help in pain management during the first stage of labor in nulliparous women, supporting its potential as a safe, noninvasive, and affordable nonpharmacological intervention. However, since the study was conducted among a limited sample of 60 participants, the findings should be interpreted cautiously. Further research with a large sample size is required to generalize the results and apply upon a broader population.

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Conflicts of interest

Nothing to declare.

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