

Clinical Trial Protocol

Iranian Registry of Clinical Trials

14 Oct 2026

A Comparative Study of the Efficacy of Proximal vs. Distal Acupressure Points on Labor Pain Intensity During the First Stage

Protocol summary

Study aim

Determining and comparing the effectiveness of acupressure of points close to the pain focus (BL31, BL32, BL33) versus distant points (GB21, LI4, SP6) on the intensity of pain in the first stage of labor in pregnant women

Design

A randomized controlled clinical trial in which 105 pregnant women will participate in three groups, and the website (<https://www.sealedenvelope.com/simple-randomiser/v1/lists>) will be used to randomly assign primiparous and multiparous women to the three groups.

Settings and conduct

In this research, all primiparous and multiparous pregnant women referred to the delivery block of Mahdiah Hospital in Tehran.

Participants/Inclusion and exclusion criteria

Inclusion criteria: - Age between 18-35 years - Number of miscarriages less than two - No history of more than two deliveries. - Skin areas where acupressure is to be performed are healthy. - Gestational age between 37-42 weeks (ultrasound before 12 weeks with LMP) - Singleton, vertex presentation - Dilation of 4-5 cm (at the beginning of the active phase of labor) - Presence of at least three contractions in 10 minutes Exclusion criteria: - Mother's unwillingness to continue participating in the study - Emergency cesarean section (after registration) - Failure to complete the three stages of the intervention - Use of pharmacological pain relief during the intervention - Occurrence of adverse outcomes (placental abruption, fetal distress, failure to progress labor) (after registration)

Intervention groups

Acupressure group points close to (BL31, BL32, BL33) pain focus / Acupressure group points far from (SP6, LI4, GB21) pain focus

Main outcome variables

Pain relief during the first stage of labor

General information

Reason for update

Acronym

IRCT registration information

IRCT registration number: **IRCT20190205042624N2**

Registration date: **2026-08-09, 1405/05/18**

Registration timing: **prospective**

Last update: **2026-08-09, 1405/05/18**

Update count: **0**

Registration date

2026-08-09, 1405/05/18

Registrant information

Name

Sedigheh Sedigh Mobarakabadi

Name of organization / entity

Country

Iran (Islamic Republic of)

Phone

+98 21 8865 5366

Email address

sedighehsedigh@sbmu.ac.ir

Recruitment status

recruiting

Funding source

Expected recruitment start date

2026-08-23, 1405/06/01

Expected recruitment end date

2027-01-20, 1405/10/30

Actual recruitment start date

empty

Actual recruitment end date

empty

Trial completion date

empty

Scientific title

A Comparative Study of the Efficacy of Proximal vs. Distal Acupressure Points on Labor Pain Intensity During the First Stage	
Public title	A Comparative study of the effectiveness of acupressure on Labor Pain Intensity During the First Stage
Purpose	Treatment
Inclusion/Exclusion criteria	Inclusion criteria: Age between 18-35 years Number of miscarriages less than two Have no history of more than two deliveries. Skin areas where acupressure is to be performed are healthy. Gestational age between 37-42 weeks (ultrasound before 12 weeks with LMP) Singleton, vertex presentation Dilation of 4-5 cm (at the beginning of the active phase of labor) Presence of at least three contractions in 10 minutes Cephalopelvic disproportion No use of analgesic drugs (chemical or herbal) in the past 8 hours. Not having a chronic disease such as cardiovascular disease, kidney disease, rheumatoid arthritis, and epilepsy No known mental illness No history of adverse events such as the death of a spouse or a close relative during pregnancy No pregnancy complications such as preeclampsia, chorioamnionitis, etc. No obstetric complications (such as abruption, abnormal fetal heart rate, etc.) at the time of entry into the study Exclusion criteria: Mother's unwillingness to continue participating in the study Emergency cesarean section (after registration) Failure to complete the three stages of the intervention Use of pharmacological pain relief during the intervention Occurrence of adverse outcomes (placental abruption, fetal distress, failure to progress labor) (after registration)
Age	From 18 years old to 35 years old
Gender	Female
Phase	N/A
Groups that have been masked	No information
Sample size	Target sample size: 105
Randomization (investigator's opinion)	Randomized
Randomization description	The website (https://www.sealedenvelope.com/simple-randomiser/v1/lists) will be used to randomly assign primiparous and multiparous women to three groups. In this way, before the start of the study, 105 people will be randomly assigned in blocks of 3, 6, and 3 in two primiparous and multiparous classes to three acupressure groups: near, far, and control. White envelopes will be provided for the primiparous class and green envelopes for the multiparous class. One envelope will be numbered from 1 to 52 and the other from 1 to 53, and the groups will be recorded and entered into the envelope based on the
	determined sequence. The sealed envelopes will be provided to the researcher conducting the intervention before the study. In this way, the researcher conducting the study will be unaware of the assignment of individuals to groups before the intervention.
	Blinding (investigator's opinion)
	Not blinded
	Blinding description
	Placebo
	Not used
	Assignment
	Parallel
	Other design features
	Secondary Ids
	empty
	Ethics committees
	1
	Ethics committee
	Name of ethics committee
	Research Ethics Committee of School of Pharmacy and Nursing & Midwifery- Shahid Beheshti University
	Street address
	Next to Taleghani hospital; SHahid Arabi Ave, Yaman street; SHahid CHamran highway
	City
	Tehran
	Province
	Tehran
	Postal code
	19839-63113
	Approval date
	2026-07-21, 1405/04/30
	Ethics committee reference number
	IR.SBMU.PHARMACY.REC.1405.112
	Health conditions studied
	1
	Description of health condition studied
	Pain relief during the first stage of labor
	ICD-10 code
	ICD-10 code description
	Primary outcomes
	1
	Description
	Pain relief during the first stage of labor
	Timepoint
	The intervention is applied at dilations of 4-5, 6-7, and 8-10 cm and for 9 minutes.
	Method of measurement
	The level of labor pain is determined using a numerical rating scale before intervention.

Secondary outcomes

empty

Intervention groups

1

Description

Intervention group: Acupressure is applied to points close to the pain focus (BL31, BL32, BL33) at dilations of 4-5, 6-7, and 8-10 cm for 9 minutes.

Category

Treatment - Other

2

Description

Intervention group: Acupressure is applied to points distant from the pain focus (SP6, LI4, GB21) at dilations of 4-5, 6-7, and 8-10 cm for 9 minutes.

Category

Treatment - Other

3

Description

Control group: The researcher is present in the delivery room, and all the measures that were performed for the intervention groups, except for acupressure, are also performed for the control group.

Category

Other

Recruitment centers

1

Recruitment center

Name of recruitment center

Mahdieh hospital, Tehran

Full name of responsible person

Nayreh Rahmati

Street address

Tehran - Shusha Square - Fedayan Islam Street -
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mahdiyeh_hospital@sbmu.ac.ir

Sponsors / Funding sources

1

Sponsor

Name of organization / entity

Shahid Beheshti University of Medical Sciences

Full name of responsible person

Afshin Zarghi

Street address

Department of Midwifery and Reproductive Health,
School of Nursing and Midwifery, Niayesh Highway,
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Grant name

Grant code / Reference number

Is the source of funding the same sponsor organization/entity?

Yes

Title of funding source

Shahid Beheshti University of Medical Sciences

Proportion provided by this source

100

Public or private sector

Public

Domestic or foreign origin

Domestic

Category of foreign source of funding

empty

Country of origin

Type of organization providing the funding

Academic

Person responsible for general inquiries

Contact

Name of organization / entity

Shahid Beheshti University of Medical Sciences

Full name of responsible person

Sedigheh Sedigh Mobarakabadi

Position

Assistant professor

Latest degree

Ph.D.

Other areas of specialty/work

Midwifery

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Person responsible for scientific inquiries**Contact****Name of organization / entity**

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Full name of responsible person

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Position

Assistant professor

Latest degree

Ph.D.

Other areas of specialty/work

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Person responsible for updating data**Contact****Name of organization / entity**

Shahid Beheshti University of Medical Sciences

Full name of responsible person

Sedigheh Sedigh Mobarakabadi

Position

Assistant Professor

Latest degree

Ph.D.

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Sharing plan**Deidentified Individual Participant Data Set (IPD)**

No - There is not a plan to make this available

Justification/reason for indecision/not sharing IPD

Some part our spss data dystroied

Study Protocol

No - There is not a plan to make this available

Statistical Analysis Plan

No - There is not a plan to make this available

Informed Consent Form

No - There is not a plan to make this available

Clinical Study Report

No - There is not a plan to make this available

Analytic Code

No - There is not a plan to make this available

Data Dictionary

No - There is not a plan to make this available