# Clinical Trial Protocol
# Iranian Registry of Clinical Trials

16 Sep 2026

## Effect of pushing with breathing techniques on perineal statue and delivery outcome in nulliparous in Kamali hospital in Karaj

## Protocol summary

**Summary**

This study is a randomized controlled clinical trial that was done in Kamali hospital in Karaj in 1392 with the participation of 166 primiparous women 40-37 weeks who were candidates for vaginal birth. The samples were randomly divided into two groups, using breathing techniques and routine pushing (Valsalva maneuver) were used.In contol group pushing was done with keeping breathing. in the breathing technique The mother was asked with the onset of abdominal pain do two deep breaths and then pulled another deep breath and exhale with open mouth and by controlling the exhale ,pushing during 5-4 seconds and then start the next pushing according to train. In intervention group, pushing continued until crowning . After that, mothers were directed to control pushing by using blowing breathing technique in order to expulsion of the head occurred only with uterine contractions, without increased abdominal pressure caused by moms excessive pushing.In routine group, Valsalva maneuver continue until fetal scalp got out. outcomes of this study include perineal status check, length of second stage of labor, fetal heart condition and the Apgar score.

## General information

**Acronym**

**IRCT registration information**

IRCT registration number: **IRCT201405258801N7**
Registration date: **2014-07-25, 1393/05/03**
Registration timing: **prospective**

Last update:
Update count: **0**

**Registration date**

2014-07-25, 1393/05/03

**Registrant information**

**Name**

Masoumeh Simbar

**Name of organization / entity**

Shahid Beheshti University for Medical Sciences

**Country**

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**Recruitment status**

**Recruitment complete**

**Funding source**

Shahid Beheshti University of Medical Sciences

**Expected recruitment start date**

2014-08-10, 1393/05/19

**Expected recruitment end date**

2014-12-03, 1393/09/12

**Actual recruitment start date**

empty

**Actual recruitment end date**

empty

**Trial completion date**

empty

**Scientific title**

Effect of pushing with breathing techniques on perineal statue and delivery outcome in nulliparous in Kamali hospital in Karaj

**Public title**

Effect of pushing with breathing techniques on perineal statue and delivery outcome in nulliparous in Kamali hospital in Karaj

**Purpose**

Prevention

**Inclusion/Exclusion criteria**

Inclusion criteria : age 18-35; gestational age ≥37 weeks ; Were anticipating a vaginal birth (both normal spontaneous or instrumental) ;normal BMI ;having 6

score or more in vaginal exam according to Brinks score Exclusion criteria :Did not wish to participate ;Had an epidural analgesia ;emergency cesarian ;occyput posteriol ;fetal birth weight> 3999 gr or<2500 ; head circumferencer <32cm or>38cm

**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: **166**

**Randomization (investigator's opinion)**
Randomized

**Randomization description**

**Blinding (investigator's opinion)**
Single blinded

**Blinding description**

**Placebo**
Not used

**Assignment**
Parallel

**Other design features**

## Secondary Ids

empty

## Ethics committees

### 1

**Ethics committee**

**Name of ethics committee**
Shahid Beheshti

**Street address**
Nursing Midwifery Collage; Niayes; Valiaasr AV; Tehran

**City**
Tehran

**Postal code**
1985717443

**Approval date**
2013-09-14, 1392/06/23

**Ethics committee reference number**
400/4013

## Health conditions studied

### 1

**Description of health condition studied**
delivery

**ICD-10 code**
O80.0

**ICD-10 code description**
Spontaneous vertex delivery

## Primary outcomes

### 1

**Description**
perineal outcome

**Timepoint**
as soon as ending delivery

**Method of measurement**
according to definition of perineal damage

### 2

**Description**
apgar

**Timepoint**
as soon as ending of delivery

**Method of measurement**
accorging to apgar definition

### 3

**Description**
during second stage of labor

**Timepoint**
at the end of intervention befor delivery

**Method of measurement**
hour(minute)

### 4

**Description**
insterument delivery

**Timepoint**
after intervention

**Method of measurement**
have- not have

### 5

**Description**
abnormal FHR sound

**Timepoint**
during intervention every 5 minuts

**Method of measurement**
sony keyd

## Secondary outcomes

empty

## Intervention groups

### 1

**Description**
The intervention group used breathing techniques from completing dilatation until fetus exit this means that with every contraction every muscle in their body starting to relax, breathe deeply through the nose is pulled so that the abdomen to protrude forward and through the nose or mouth and then through the nose or mouth half open while the abdominal muscles are contracted to carry out

a deep breath through opening half .then take a deep breath again and pulled with all our strength, and with half-open mouth during 5-4 seconds and then empty air with a longer tail and did the next force until that contract ends.At the end of the contraction did other two the deep abdominal breathing (straining with an open glottis). This trend continued until the head is going to exit. At this time people took a deep breath and began to blowing as long as 3-2 seconds Such as blowing a few candles .

**Category**

Prevention

**2**

**Description**

In control subjects using Valsalva maneuver for pushing in the second stage. This means that initially took a deep breath and hold it for 10 seconds and proceed with straining to have a closed glottis.

**Category**

Prevention

## Recruitment centers

**1**

**Recruitment center**

**Name of recruitment center**

Kamali hospital

**Full name of responsible person**

Mrs Tahlavi

**Street address**

Kamali AV, Karaj

**City**

Karaj

## Sponsors / Funding sources

**1**

**Sponsor**

**Name of organization / entity**

Shahid Beheshti University of Medical Sciences

**Full name of responsible person**

Ali Ziaee

**Street address**

MedicalCollage,Kudakyar AV,Evin,Tehran

**City**

Tehran

**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**

*empty*

**Domestic or foreign origin**

*empty*

**Category of foreign source of funding**

*empty*

**Country of origin**

**Type of organization providing the funding**

*empty*

## Person responsible for general inquiries

**Contact**

**Name of organization / entity**

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**Full name of responsible person**

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Student Of Master Of Midwifery

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## Sharing plan

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

*empty*

**Study Protocol**

*empty*

**Statistical Analysis Plan**

*empty*

**Informed Consent Form**

*empty*

**Clinical Study Report**

*empty*

**Analytic Code**

*empty*

**Data Dictionary**

*empty*