

# Clinical Trial Protocol

## Iranian Registry of Clinical Trials

09 Jun 2026

### The effects of sauna on pain relief and range of motion in rheumatoid arthritis patients

#### Protocol summary

##### Summary

The present study investigated the effect of sauna on pain and joint range of motion in patients with rheumatoid arthritis. In this randomized clinical trial, 45 patients with rheumatoid arthritis, who were referred to medical centers in Mashhad and meet eligibility criteria were assigned into one of following three groups. The patients in the intervention group used Sauna either one time or twice a week, each for 10 minutes for 28 days. The patients in the control group didn't use sauna. The severity of pain was measured on 1, 15, and 28 days after the intervention for all groups and 16 and 22 days for the intervention group. Joint range of motion was measured by goniometer before and after the intervention.

#### General information

##### Acronym

##### IRCT registration information

IRCT registration number: **IRCT201008274115N1**

Registration date: **2010-08-27, 1389/06/05**

Registration timing: **retrospective**

Last update:

Update count: **0**

##### Registration date

2010-08-27, 1389/06/05

##### Registrant information

###### Name

Amir Tabatabaee

###### Name of organization / entity

Islamic Azad University- Quchan Branch

###### Country

Iran (Islamic Republic of)

###### Phone

+98 51 3726 2676

##### Email address

tabatabaee\_amir@yahoo.com

##### Recruitment status

**Recruitment complete**

##### Funding source

Islamic Azad University, Quchan branch

##### Expected recruitment start date

2004-06-24, 1383/04/04

##### Expected recruitment end date

2005-10-15, 1384/07/23

##### Actual recruitment start date

empty

##### Actual recruitment end date

empty

##### Trial completion date

empty

##### Scientific title

The effects of sauna on pain relief and range of motion in rheumatoid arthritis patients

##### Public title

The effects of sauna on pain join in rheumatoid arthritis patients

##### Purpose

Supportive

##### Inclusion/Exclusion criteria

Inclusion criteria: male, age 25 years, having no history of cardiovascular disease and respiratory complications and renal function, drug addiction or abuse, lack of disasters and severe cases Aztrabangyz In the past month Exclusion criteria: changing in the number or type of drugs during the study

##### Age

From **32 years** old to **72 years** old

##### Gender

Male

##### Phase

1

## Groups that have been masked

No information

## Sample size

Target sample size: 45

## Randomization (investigator's opinion)

Randomized

## Randomization description

## 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

School of Nursing, Mashhad University of Medical Sciences,

##### Street address

Doctora Cross, Ebnesina street

##### City

Mashhad

##### Postal code

9137913199

#### Approval date

1994-09-29, 1373/07/07

#### Ethics committee reference number

4557/117

## Health conditions studied

### 1

#### Description of health condition studied

Rheumatoid arthritis

#### ICD-10 code

M06.9

#### ICD-10 code description

Rheumatoid arthritis, unspecified

## Primary outcomes

### 1

#### Description

pain

#### Timepoint

3-7 days

#### Method of measurement

pain scale

### 2

#### Description

range of motion

#### Timepoint

3-7 days

#### Method of measurement

gonyometer

## Secondary outcomes

### 1

#### Description

pulse rate

#### Timepoint

30 min

#### Method of measurement

touch

### 2

#### Description

Blood pressure

#### Timepoint

30 minutes

#### Method of measurement

sphygmomanometer

## Intervention groups

### 1

#### Description

Dry sauna bath, 90 ° C heat and cold shower, 10 minutes, once a week

#### Category

Other

### 2

#### Description

Dry sauna bath, 90 ° C heat and cold shower, 10 minutes, twice a week

#### Category

Other

### 3

#### Description

The control group did not use the sauna bath.

#### Category

Other

## Recruitment centers

### 1

#### Recruitment center

##### Name of recruitment center

Ghaem Hospital

##### Full name of responsible person

Dr. Saghafi

**Street address**

Ghaem Hospital, Ahmadabad street

**City**

Mashhad

## Sponsors / Funding sources

### 1

**Sponsor**

**Name of organization / entity**

Islamic Azad University-Quchan branch

**Full name of responsible person**

Amir Tabatabaee

**Street address**

Nursing Group, Islamic Azad University

**City**

Quchan

**Grant name**

**Grant code / Reference number**

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

Yes

**Title of funding source**

Islamic Azad University-Quchan branch

**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**

Gonabad University of Medical Sciences

**Full name of responsible person**

Ali Mohmmadpour

**Position**

PhD of Nursing - Faculty Member

**Other areas of specialty/work**

**Street address**

Gonabad University of Medical Sciences, Margin Sento  
Street-

**City**

Gonabad

**Postal code**

**Phone**

+98 915 177 9436

**Fax**

**Email**

mohammadpour@razi.tums.ac.ir

**Web page address**

## Person responsible for scientific

## inquiries

**Contact**

**Name of organization / entity**

Islamic Azad University- Quchan Branch

**Full name of responsible person**

Amir Tabatabaee

**Position**

MSN- Faculty Member

**Other areas of specialty/work**

**Street address**

Nursing Group-Islamic Azad University- Quchan  
Branch

**City**

Quchan

**Postal code**

**Phone**

+98 51 1726 2676

**Fax**

**Email**

tabatabaee\_amir@yahoo.com

**Web page address**

## Person responsible for updating data

**Contact**

**Name of organization / entity**

Islamic Azad University- Quchan Branch

**Full name of responsible person**

Amir Tabatabaee

**Position**

MSN - Faculty Member

**Other areas of specialty/work**

**Street address**

Nursing Group -Islamic Azad University- Quchan  
Branch

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tabatabaee\_amir@yahoo.com

**Web page address**

## 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*