

Clinical Trial Protocol

Iranian Registry of Clinical Trials

05 Jun 2026

Comparison of Liquorice and Zataria multiflora effects on gastrointestinal symptoms in ICU and CCU nurses

Protocol summary

Summary

Background and goal: According to prevalence of gastrointestinal disorders among intensive care unit (ICU) nurses, current study focuses on a comparison between effects of Glycyrrhiza glabra and Zataria multiflora on gastrointestinal disorders to introduce an efficient, safe, and affordable method to treat these disorders. Inclusion criteria: At least 1 year record of service in intensive care unit, and affected by gastrointestinal disturbances during the last week. Exclusion criteria: Affected by any severe systemic diseases. Moreover, volunteers receiving any medical treatment of stress induced symptoms (such as sleeping pills, antidepressants, or anxiolytics). Methodology: To do so, 105 ICU nurses are sampled according to the aforementioned inclusion and exclusion criteria, triple-blind (nursing, researcher and analyzer) and classified to three groups, including two intervention groups and one control group, randomly. Then, treatment is carried out through Glycyrrhiza glabra and Zataria multiflora in first and second intervention groups, respectively for 4 weeks while placebo is utilized for the control group. Primary outcome measures including reflux, abdominal pain, flatulence, constipation and diarrhea. Secondary outcome measure including dry mouth, vomiting, abdominal pain result by hunger. Then, existence of gastrointestinal symptoms and their intensity in nurses (based on visual analog scale (VAS) grade) are evaluated via a questionnaire before and after treatment.

General information

Acronym

IRCT registration information

IRCT registration number: **IRCT2014100419330N2**

Registration date: **2014-11-22, 1393/09/01**

Registration timing: **retrospective**

Last update:

Update count: **0**

Registration date

2014-11-22, 1393/09/01

Registrant information

Name

Zaynab Vafa Arani

Name of organization / entity

Arak university of medical science

Country

Iran (Islamic Republic of)

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Recruitment status

Recruitment complete

Funding source

Arak University of Medical Science

Expected recruitment start date

2014-10-23, 1393/08/01

Expected recruitment end date

2014-11-22, 1393/09/01

Actual recruitment start date

empty

Actual recruitment end date

empty

Trial completion date

empty

Scientific title

Comparison of Liquorice and Zataria multiflora effects on gastrointestinal symptoms in ICU and CCU nurses

Public title

A comparison between effects of Glycyrrhiza glabra and Zataria multiflora on gastrointestinal disorders of ICU nurses

Purpose

Treatment

Inclusion/Exclusion criteria

Inclusion criteria: To be eligible for this trial, each volunteer needs to meet the following criteria at a screening and baseline visit: Volunteers between 20 to 55 years old, male or female, capable of giving informed consent, to have at least 1 year record of service in intensive care unit, and affected by gastrointestinal disturbances during the last week. Exclusion criteria: Nonconformity with medication regimen, being affected by any severe systemic diseases. Moreover, volunteers that are receiving any medical treatment of stress induced symptoms (such as sleeping pills, antidepressants, or anxiolytics) or those who have taken such treatment since 3 months ago or later are also excluded. In addition, those volunteers who are using nicotine or who have weaned since 6 months ago are excluded.

Age

From **20 years** old to **55 years** old

Gender

Both

Phase

N/A

Groups that have been masked

No information

Sample size

Target sample size: **105**

Randomization (investigator's opinion)

Randomized

Randomization description

Blinding (investigator's opinion)

Triple blinded

Blinding description

Placebo

Used

Assignment

Parallel

Other design features

A random number between 1 and 105 is assigned to each of nurses (satisfying inclusion criteria) and then they classified to three groups via random number generation.

Secondary Ids

empty

Ethics committees

1

Ethics committee

Name of ethics committee

Ethics Committee of Arak University of Medical Science

Street address

Basij square, Sardasht, Arak, Iran

City

Arak

Postal code

Approval date

2014-07-22, 1393/04/31

Ethics committee reference number

1915/1/5/29/پ

Health conditions studied

1

Description of health condition studied

Irritable bowel syndrome

ICD-10 code

k58

ICD-10 code description

Irritable bowel syndrome

2

Description of health condition studied

Constipation

ICD-10 code

k59.0

ICD-10 code description

Constipation

3

Description of health condition studied

Functional diarrhoea

ICD-10 code

k59.1

ICD-10 code description

Functional diarrhoea

4

Description of health condition studied

Fissure and fistula of anal and rectal regions

ICD-10 code

k60

ICD-10 code description

Fissure and fistula of anal and rectal regions

5

Description of health condition studied

Abscess of anal and rectal regions

ICD-10 code

k61

ICD-10 code description

Abscess of anal and rectal regions

6

Description of health condition studied

Other diseases of anus and rectum

ICD-10 code

k62

ICD-10 code description

Other diseases of anus and rectum

7

Description of health condition studied

Other diseases of intestine

ICD-10 code

k63

ICD-10 code description

Other diseases of intestine

8**Description of health condition studied**

Other specified diseases of digestive system

ICD-10 code

k92.8

ICD-10 code description

Other specified diseases of digestive system

9**Description of health condition studied**

Disease of digestive system, unspecified

ICD-10 code

K92.9

ICD-10 code description

Disease of digestive system, unspecified

Primary outcomes**1****Description**

Abdominal pain

Timepoint

4 weeks

Method of measurement

Questionnaire

2**Description**

Pyrosis

Timepoint

4 weeks

Method of measurement

Questionnaire

Secondary outcomes**1****Description**

Change in bowel habits (Constipation, Diarrhea)

Timepoint

4 Weeks

Method of measurement

Questionnaire

2**Description**

Reflux

Timepoint

4 Weeks

Method of measurement

Questionnaire

3**Description**

Flatulence

Timepoint

4 Weeks

Method of measurement

Questionnaire

4**Description**

Xerostomia

Timepoint

4 Weeks

Method of measurement

Questionnaire

5**Description**

Vomiting

Timepoint

4 Weeks

Method of measurement

Questionnaire

6**Description**

Abdominal pain caused by hunger

Timepoint

4 Weeks

Method of measurement

Questionnaire

Intervention groups**1****Description**

First intervention group: First intervention group treatment is carried out via Glycyrrhiza glabra (3 capsule D-reglis: 650mg per day) during 4 weeks.

Category

Treatment - Drugs

2**Description**

Control group: In control group, placebo is utilized (3 capsule starches per day) during 4 weeks.

Category

Placebo

3**Description**

Second intervention group: Second intervention group treatment is carried out via Zataria multiflora (3 capsule gastrolit: 20 mg per day) during 4 week.

Category

Treatment - Drugs

Recruitment centers

1

Recruitment center

Name of recruitment center

Shahid Beheshti hospital

Full name of responsible person

Street address

City

Kashan

2

Recruitment center

Name of recruitment center

Imam Ali Heart Center

Full name of responsible person

Street address

City

Kashan

Sponsors / Funding sources

1

Sponsor

Name of organization / entity

Vice Chancellor for Research of Arak University of
Medical Science

Full name of responsible person

Dr. Davood Hekmatpou

Street address

Amir-al-momenin hospital, Basij square, Sardasht,
Arak, Iran

City

Arak

Grant name

Grant code / Reference number

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

Yes

Title of funding source

Vice Chancellor for Research of Arak University of
Medical Science

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

Arak university of medical science

Full name of responsible person

Dr. Sharareh Khosravi

Position

Nursing Ph.D.

Other areas of specialty/work

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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