

Clinical Trial Protocol

Iranian Registry of Clinical Trials

10 Jun 2026

Comparison of the Effect of Herbal Tea with Achillea Millefolium Capsule on the severity of Primary Dysmenorrhea

Protocol summary

Study aim

Comparison of the effect of herbal tea with yarrow extract capsule on the severity of primary dysmenorrhea

Design

Clinical trial with randomized, non-blinded parallel groups on 60 female students in two groups receiving yarrow herbal tea and yarrow extract capsules

Settings and conduct

Presentation of yarrow herbal tea and capsule extract to female students living in Gonabad University of Medical Sciences dormitory and evaluation of primary dysmenorrhea pain before and on the first, second and third days in two menstrual cycles

Participants/Inclusion and exclusion criteria

Inclusion criteria: conscious consent, age range 15 to 45 years, regular menstruation at intervals of 21 to 35 days, dysmenorrhea pain score greater than 5, no history of chronic physical diseases, no use of hormonal drugs and birth control pills in three months In the past, no accidents in the last six months, no allergies to herbs and no allergies during the study, the onset of pain at the same time as the onset of menstruation or a few hours before the onset of menstruation and pain lasting up to 48 to 72 hours, no abnormal bleeding Do not use painkillers during the study, use capsules and teas according to the method of work Conditions for non-entry included: unwillingness to cooperate.

Intervention groups

Yarrow Extract Capsule Group: Receive capsules containing 150 mg of yarrow and take one every 8 hours. Yarrow herbal tea group: Receive teas containing 4 grams of yarrow and daily consumption of three with a meal with 300 ml of boiling water

Main outcome variables

Severe pain of primary dysmenorrhea

General information

Reason for update

Acronym

IRCT registration information

IRCT registration number: **IRCT20180221038821N4**
Registration date: **2020-11-07, 1399/08/17**
Registration timing: **prospective**

Last update: **2020-11-07, 1399/08/17**

Update count: **0**

Registration date

2020-11-07, 1399/08/17

Registrant information

Name

Iman Ghorbany Moghaddam

Name of organization / entity

Country

Iran (Islamic Republic of)

Phone

+98 51 5722 0576

Email address

ghorbani.i@gmu.ac.ir

Recruitment status

Recruitment complete

Funding source

Expected recruitment start date

2020-11-21, 1399/09/01

Expected recruitment end date

2021-02-19, 1399/12/01

Actual recruitment start date

empty

Actual recruitment end date

empty

Trial completion date

empty

Scientific title

Comparison of the Effect of Herbal Tea with Achillea Millefolium Capsule on the severity of Primary Dysmenorrhea

Public title

Comparison of the Effect of Herbal Tea with Achillea Millefolium Capsule on the severity of Primary Dysmenorrhea in Students Residing in Dormitories of Gonabad University of Medical Sciences

Purpose

Supportive

Inclusion/Exclusion criteria

Inclusion criteria:

Informed consent Being 15 to 45 years old Having regular menstruation with intervals of 21 to 35 days according to the statements of research units Having dysmenorrhea pain with a score higher than 5 according to the visual pain scale No history of physical illnesses such as asthma, allergies, migraines, diabetes, thalassemia, hypertension, thyroid, cardiovascular disease and no pelvic inflammatory disease diagnosed uterine problems such as abnormal bleeding and ovarian cysts based on patient statement Do not take hormonal drugs and oral contraceptives for the past three months No accidents during the last six months, according to research units Lack of sensitivity to medicinal and chemical plants according to the statements of research units The onset of menstrual cramps coincides with the onset of menstrual bleeding or a few hours before the onset of menstruation and lasts for a maximum of 48 to 72 hours, according to research units. No abnormal bleeding during the study Do not use housing while studying Absence of any effects indicating an allergic reaction based on the researcher's observation and the statements of research units Use yarrow capsule or tea according to the recommended method

Exclusion criteria:

Reluctance to continue participating in the study

Age

From **15 years** old to **45 years** old

Gender

Female

Phase

N/A

Groups that have been masked

No information

Sample size

Target sample size: **60**

Randomization (investigator's opinion)

Randomized

Randomization description

Using a simple random method (coin toss) into two groups of consumption of tea (heads) or consumption of yarrow capsules (tails)

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

Ethical Committee of Gonabad University of Medical Sciences

Street address

Asian Road Rim, Gonabad University of Medical Sciences

City

Gonabad

Province

Razavi Khorasan

Postal code

96916-47161

Approval date

2020-04-18, 1399/01/30

Ethics committee reference number

IR.GMU.REC.1399.020

Health conditions studied

1

Description of health condition studied

Primary dysmenorrhea

ICD-10 code

N94

ICD-10 code description

Pain and other conditions associated with female genital organs and menstrual cycle

Primary outcomes

1

Description

Pain

Timepoint

At the beginning of the study (before the intervention) and at the end of the first, second and third days of each menstrual cycle

Method of measurement

Visual Analogue Scale

Secondary outcomes

empty

Intervention groups

1

Description

Intervention group: Group receiving Yarrow extract capsule. Yarrow hydroalcoholic extract was obtained with the help of a biochemist and injected in special capsules in the amount of 150 mg. The capsules were taken every eight hours and three times a day for the first to third days of menstruation for two cycles. Yarrow was

collected from the nature of the region by a researcher.

Category

Treatment - Drugs

2**Description**

Intervention group: group receiving Yarrow herbal Tea. In this group, yarrow plant collected from nature was mixed with candy (for sweetening) and ground. 4 grams of ground yarrow was poured into ready-made tea bags and delivered to the research units. The teas were consumed every eight hours with 300 ml of boiling water and after meals in the first to third days of menstruation for two cycles.

Category

Treatment - Other

Recruitment centers**1****Recruitment center****Name of recruitment center**

Dormitories for female students of Gonabad
University of Medical Sciences

Full name of responsible person

Dr. Javad Bazeli

Street address

Asian Roadside, Gonabad University of Medical
Sciences

City

Gonabad

Province

Razavi Khorasan

Postal code

9691793718

Phone

+98 51 5722 3514

Email

info@gmu.ac.ir

Sponsors / Funding sources**1****Sponsor****Name of organization / entity**

Gonabad University of Medical Sciences

Full name of responsible person

Dr. Shahla Khosravan

Street address

Asian Road Rim, Gonabad University of Medical
Sciences, Deputy of research and technology

City

Gonabad

Province

Razavi Khorasan

Postal code

9691793718

Phone

+98 51 5722 0576

Email

info@gmu.ac.ir

Grant name**Grant code / Reference number****Is the source of funding the same sponsor organization/entity?**

Yes

Title of funding source

Gonabad 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**

Gonabad University of Medical Sciences

Full name of responsible person

Iman Ghorbany Moghaddam

Position

Nurse

Latest degree

Bachelor

Other areas of specialty/work

Nursery

Street address

No9, Behesht Street, Emam Sajjad Blvd, Gonabad
Town

City

Gonabad

Province

Razavi Khorasan

Postal code

9691647161

Phone

+98 51 5725 0773

Fax**Email**

imanghorbany135213@gmail.com

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

Gonabad University of Medical Sciences

Full name of responsible person

Iman Ghorbany Moghaddam

Position

Nurse

Latest degree

Bachelor

Other areas of specialty/work

Nursery
Street address
No9, Behesht Street, Emam Sajjad Blvd, Gonabad
Town
City
Gonabad
Province
Razavi Khorasan
Postal code
9691647161
Phone
+98 51 5725 0773
Fax
Email
imanghorbany135213@gmail.com

Person responsible for updating data

Contact

Name of organization / entity
Gonabad University of Medical Sciences
Full name of responsible person
Iman Ghorbany Moghaddam
Position
Nurse
Latest degree
Bachelor
Other areas of specialty/work
Nursery
Street address
No9, Behesht Street, Emam Sajjad Blvd, Gonabad
Town
City
Gonabad

Province
Razavi Khorasan
Postal code
9691647161
Phone
+98 51 5725 0773
Fax
Email
imanghorbany135213@gmail.com

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

Data not collected.

Study Protocol

Undecided - It is not yet known if there will be a plan to make this available

Statistical Analysis Plan

Undecided - It is not yet known if there will be a plan to make this available

Informed Consent Form

Undecided - It is not yet known if there will be a plan to make this available

Clinical Study Report

Undecided - It is not yet known if there will be a plan to make this available

Analytic Code

Undecided - It is not yet known if there will be a plan to make this available

Data Dictionary

Undecided - It is not yet known if there will be a plan to make this available