Clinical Trial Protocol
Iranian Registry of Clinical Trials

22 Nov 2026

Assessing the effect of aerobic exercises on cardiorespiratory and cardiometabolic fitness in post menopausal females in Multan

Protocol summary

Study aim
Exploring the effect of stress inducers aerobic exercises (stair climbing, 6MWT, step up)between BP, HR, oxygen saturation, glucose level, lipid profile, temperature, and RR estrogen and progesterone level of post-menopausal females of Multan with body mass index and cardiorespiratory and cardiometabolic health.

Design
Randomized control trial, three parallel groups design, triple blinded study with a sample size of 45

Settings and conduct
Shahbaz Sharif Hospital, Muhammad Rehabilitation center, Faiz hospital

Participants/Inclusion and exclusion criteria
Including Criteria: Females; Aged 40-60 years; Postmenopausal females; Good mental and physical health; Naturally menopausal females; Negative screening mammogram. Exclusion criteria: Young females; Perimenopausal females; Any type of physical disability; Any type of major surgery; Females with osteoporosis and osteoarthritis; History of melanoma or breast cancer; Females who have any type of hormone replacement therapy.

Intervention groups
3 groups of intervention are included in this study. group 1 with 6 minute walk test, group 2 with stair climbing exercise and group 3 with step up exercise

Main outcome variables
cardiorespiratory and cardiometabolic parameters improvement

General information

Reason for update

Acronym
cross sectional experimental study

IRCT registration information
IRCT registration number: **IRCT20230718058826N3**
Registration date: **2023-09-01, 1402/06/10**
Registration timing: **registered_while_recruiting**

Last update: **2023-09-01, 1402/06/10**
Update count: **0**

Registration date
2023-09-01, 1402/06/10

Registrant information

Name
Perwasha Perwasha

Name of organization / entity
Muhammad Institute of Medical and Allied Sciences, Multan, Pakistan.

Country
Pakistan

Phone
+92 310 6562039

Email address
perwashanaseer123@gmail.com

Recruitment status
Recruitment complete

Funding source

Expected recruitment start date
2023-07-29, 1402/05/07

Expected recruitment end date
2023-09-14, 1402/06/23

Actual recruitment start date
empty

Actual recruitment end date
empty

Trial completion date
empty

Scientific title
Assessing the effect of aerobic exercises on cardiorespiratory and cardiometabolic fitness in post menopausal females in Multan

Public title

Assessing the effect of aerobic exercises on cardiorespiratory and cardiometabolic fitness in post menopausal females in Multan

Purpose

Health service research

Inclusion/Exclusion criteria

Inclusion criteria:

Females 40-60 post menopausal females good mental and physical health natural menopausal negative screening mammogram

Exclusion criteria:

young females perimenopausal any type of physical and mental disability, major surgery females with OP OA history of melanoma or breast cancer hormone replacement therapy patient

Age

From **40 years** old to **60 years** old

Gender

Female

Phase

N/A

Groups that have been masked

- Participant
- Investigator
- Data analyser

Sample size

Target sample size: **45**

Randomization (investigator's opinion)

Randomized

Randomization description

Allocation is done by the lottery method in which the names of the participants are written on pieces of paper and randomly chosen the paper by an individual and then people are allocated randomly to different groups without knowing which participant is added to which intervention group.

Blinding (investigator's opinion)

Triple blinded

Blinding description

in this study, triple blinding method involved in which the participants, investigator and data analyzer will be blinded. Participants randomly allocate in different intervention group and they do not know about exercise in any intervention group ,investigator randomly allocate the patient or participant and data analyzer will be independent for results.

Placebo

Not used

Assignment

Parallel

Other design features

Secondary Ids

empty

Ethics committees

1

Ethics committee

Name of ethics committee

Ethical Committee of Muhammad Institute of Medical and Allied Sciences

Street address

HBL street near sabzazar metro station bosan road Multan

City

Multan

Postal code

66000

Approval date

2023-07-10, 1402/04/19

Ethics committee reference number

2023/ MIMAS/Anosha/07/19

Health conditions studied

1

Description of health condition studied

cardiorespiratory and cardiometabolic health in post menopausal females age 40-60

ICD-10 code

ICD-10

ICD-10 code description

post menopausal females, cardiorespiratory fitness

Primary outcomes

1

Description

Improve Cardiorespiratory and cardiometabollic health

Timepoint

time duration of study will be six weeks. 5 days in a weak for 6 weeks

Method of measurement

BP, RR, HR, Temperature, Oxygen saturation, glucose level, cholestrol level

Secondary outcomes

1

Description

Quality of life

Timepoint

time duration of study will be 6 weeks. 5 days in a week for 6 weeks

Method of measurement

vo2max,cardiorespiratory parameters

Intervention groups

1

Description

"Intervention Group 1": with 6 Minute Walk Test (6MWT)A 30m walking pace will be decided. Subjects will be

instructed to walk from end to end, while attempting to cover as much distance as possible in the 6 minutes. The time and distance covered will be recorded. The Borg scales for dyspnea and leg fatigue, as well as heart rate were recorded before and immediately after completion of the walk test(24). BP, HR, RR, temperature and oxygen saturation will be measured before and after the exercise.

Category
Lifestyle

2

Description
"Intervention Group 2": with Stair climbing3 bouts of stair climbing will be separated. In this, protocol will be included 3 daily bouts of ascending a 3-flight stairwell (10 steps) for 4 minutes gently without break. The height of step will be 35cm. This activity will be performed 5days/week for 6 weeks. BP, HR, RR, temperature and oxygen saturation will be measured before and after the exercise.

Category
Lifestyle

3

Description
'Intervention group 3": with Step up exercise3 sets with 10 repetitions in each set will be performed for 6 weeks. BP, HR, RR, temperature and oxygen saturation will be measured before and after the exercise.

Category
Lifestyle

Recruitment centers

1

Recruitment center

Name of recruitment center
Faiz hospital

Full name of responsible person
Nimra Arif

Street address
BCG chock

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Multan

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66000

Phone
+92 321 6563479

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nimraarif@gmail.com

2

Recruitment center

Name of recruitment center
Shahbaz Sharif hospital

Full name of responsible person
Ali Abbas

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Fawara chock

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Multan

Postal code
66000

Phone
+92 321 5654897

Email
shahbaz@gmail.com

Web page address

3

Recruitment center

Name of recruitment center
MIMAS, Multan

Full name of responsible person
Imran Ahmad Khan

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HBL street near sabzazar metro station bosan road Multan

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Multan

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imtanahmadkhandurrani@gmail.com

Sponsors / Funding sources

1

Sponsor

Name of organization / entity
CUVAS

Full name of responsible person
Zahid Manzoor

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Bahawalpur, Punjab, Pakistan

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63100

Phone
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Email
zahidmanzoor@cuvas.edu.pk

Grant name
scholarship for research

Grant code / Reference number
4531

Is the source of funding the same sponsor organization/entity?
No

Title of funding source
scholarship for research

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
CUVAS
Full name of responsible person
Zahid Manzoor
Position
associate professor
Latest degree
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Other areas of specialty/work
Toxicology
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Sharing plan

Deidentified Individual Participant Data Set (IPD)
Yes - There is a plan to make this available
Study Protocol
Yes - There is a plan to make this available
Statistical Analysis Plan
Yes - There is a plan to make this available
Informed Consent Form
Yes - There is a plan to make this available
Clinical Study Report
Yes - There is a plan to make this available
Analytic Code
Yes - There is a plan to make this available
Data Dictionary
Yes - There is a plan to make this available
Title and more details about the data/document
Aim of this study is to explore the correlates(BP, HR, oxygen saturation, glucose level, lipid profile, temperature, RR) of post menopausal females of Multan that are associated with body mass index and cardiorespiratory and cardiometabollic health. Aim of this study is to improve the quality of life. 1.4. Expected Outcomes This study will investigate the correlation of cardiorespiratory fitness and cardiometabolic with body mass index in post menopausal females of Multan and also investigate the respiratory improvements.
When the data will become available and for how long
After the protocol completion data will be available for long time
To whom data/document is available
Supervisor provided the all documents
Under which criteria data/document could be used
Under strict ethical consideration

From where data/document is obtainable

from secretary BASR

What processes are involved for a request to access data/document

IRB form, informed consent for and reports

Comments

Kindly approve it