Clinical Trial Protocol
Iranian Registry of Clinical Trials

22 Nov 2026

EFFECTS OF WHOLE-BODY VIBRATION THERAPY ALONG WITH PLYOMETRICS ON AGILITY,LOWER EXTREMITY FUNCTION AND GAIT IN FOOTBALLERS

Protocol summary

Study aim
To compare the effects of whole-body vibration along with plyometric on agility,lower extremity function and gait in footballers

Design
single-blinded Randomized control trial with 2 groups. A total of 30 participants will be recruited from a single center. The sample size was calculated using Gpower version 3.1.9.7. sealed enevelop method will be used to randomzied the participants in two euqal groups (as per the description of Randomization).

Settings and conduct
would be condcuted in Young star football club Phalia . it would be sinlgle blinded study with assessor is blind, thecare provider wil not be blinded

Participants/Inclusion and exclusion criteria
male Footballers with regular training from last 2 years with Age 18- 27 years would be included participant with Lower limb injury past six months, History of no chronic illness,Recent fracture, Cardiopulmonary issues would be excluded

Intervention groups
Group A Whole body vibration therapy and plyometric group B plyometric training only

Main outcome variables
Lower Extremity Function Agility Gait Kinematics: (walking speed, step length)

General information

Reason for update

Acronym

IRCT registration information
IRCT registration number: **IRCT20230706058691N1**
Registration date: **2023-11-20, 1402/08/29**
Registration timing: **registered_while_recruiting**
Last update: **2023-11-20, 1402/08/29**
Update count: **0**

Registration date
2023-11-20, 1402/08/29

Registrant information

Name
Zainab Hassan

Name of organization / entity
University of Management and Technology Lahore Pakistan

Country
Pakistan

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Recruitment status
Recruitment complete

Funding source

Expected recruitment start date
2023-07-21, 1402/04/30

Expected recruitment end date
2023-12-23, 1402/10/02

Actual recruitment start date
empty

Actual recruitment end date
empty

Trial completion date
empty

Scientific title
EFFECTS OF WHOLE-BODY VIBRATION THERAPY ALONG WITH PLYOMETRICS ON AGILITY,LOWER EXTREMITY FUNCTION AND GAIT IN FOOTBALLERS

Public title
effects of WBV and pylometric in football players

Purpose
Treatment
Inclusion/Exclusion criteria
Inclusion criteria:
• Age 18- 27 years • Footballers with regular training from last 2 years • Only males
Exclusion criteria:
• Lower limb injury past six months • History of no chronic illness • Recent fracture • Cardiopulmonary issues • Muscle or tendon injuries • No motor dysfunction • No Vestibular dysfunction
Age
From **18 years** old to **27 years** old
Gender
Male

Phase
N/A
Groups that have been masked

- Outcome assessor

Sample size
Target sample size: **30**
Randomization (investigator's opinion)
Randomized
Randomization description
Before the process of randomization, we will screen all the participants and assign them a unique number from 1 to 30. Then the process of randomization will be carried out using Random Allocation software version 1.0 (developed by the Department of Anaesthesia, Isfahan University of Medical Sciences, Isfahan, Iran). It is a randomization software for parallel group trials. It requires the total sample size and the total number of groups. We will add a total sample size of 30 participants and 2 groups into the software with only one block. The software generates an output file that can be opened with internet explorer. The output file contains a list of number along with assigned groups. In our case, the groups will be A and B with 15 participants in each group. Then this sequence will be used for participant allocation in the study groups
Blinding (investigator's opinion)
Single blinded
Blinding description
The care provider will not be blinded to the groups of the study (i.e. Treatment and Control Group). While the outcome assessors will be blinded to the treatment protocols and study hypothesis
Placebo
Not used
Assignment
Parallel
Other design features

Secondary Ids

empty

Ethics committees

1

Ethics committee
Name of ethics committee
riphah international university lahore
Street address
28-M quaid e azam industrial estate kot lakhat lahore
City
lahore
Postal code
54770
Approval date
2023-07-12, 1402/04/21
Ethics committee reference number
REC/RCR&AHS/23/0463

Health conditions studied

1

Description of health condition studied
normal foot ballers
ICD-10 code
ICD-10 code description

Primary outcomes

1

Description
1. Lower Extremity Function: Lower Extremity Function scale
Timepoint
before and after the intervention
Method of measurement
LEFS QUESTIONERE

2

Description
Gait Kinematics: (walking speed, step length) through kinovea software
Timepoint
Before and after the intervention
Method of measurement
step length and stride length in cm and walking speed in m/sec

3

Description
Agility
Timepoint
before and after the intervention
Method of measurement
Agility T-test

Secondary outcomes

empty

Intervention groups

1

Description
Intervention group: whole body vibration and plyometric ...3sessions per week for 4 weeks, 30 min a day with 25 Hz with a patient standing on the vibration platform barefooted with feet parallel and in semi squat position. The feet will be placed at an equal distance from the center line of the device when standing.plyometric training include Sessions take about 35 minutes and start with regular 10 minutes (min) warm-up, 5 min of a jog, 5 min of stretching, and 20 min of side jumping (SJ), countermovement jump (CMJ) and double-bound leg jumping (DBJ) training and five minutes of cooling down. SJ was an exercise in which subjects had to jump side to side between a cone with feet together while CMJ needed subjects to fully bend their knees with arm swing backwards followed by one jump as high as possible with arm swing forward and upward. DBJ required the subjects to jump forward horizontally twice with both feet close together. Each exercise was performed with ten repetitions for each set. It was decided that every type of jumps were performed for four sets with ten repetitions in each set as shown in Table 2. Rest was given 3 minutes between each set and 5 minutes between each exercise.(1)Pre and post intervention values will be taken on 1st day and after 4 weeks.

Category
Rehabilitation

2

Description
Intervention group group B PLYOMETRIC TRAINING ONLY Sessions take about 35 minutes and start with regular 10 minutes (min) warm-up, 5 min of a jog, 5 min of stretching, and 20 min of side jumping (SJ), countermovement jump (CMJ) and double-bound leg jumping (DBJ) training and five minutes of cooling down. SJ was an exercise in which subjects had to jump side to side between a cone with feet together while CMJ needed subjects to fully bend their knees with arm swing backwards followed by one jump as high as possible with arm swing forward and upward. DBJ required the subjects to jump forward horizontally twice with both feet close together. Each exercise was performed with ten repetitions for each set. It was decided that every type of jumps were performed for four sets with ten repetitions in each set as shown in Table 2. Rest was given 3 minutes between each set and 5 minutes between each exercise.(1)Pre and post intervention values will be taken on 1st day and after 4 weeks.

Category
Rehabilitation

Recruitment centers

1

Recruitment center
Name of recruitment center
Young star football club Phalia
Full name of responsible person
Muniba Naveed
Street address
mandibahudin phallian
City
lahore
Postal code
50430
Phone
+92 342 7517174
Email
munibanaveed1@gmail.com

Sponsors / Funding sources

1

Sponsor
Name of organization / entity
riphah international niversity lahore
Full name of responsible person
munia naveed
Street address
mader millat road
City
lahore
Postal code
54770
Phone
+92 342 7517164
Email
munibanaveed1@gmail.com
Grant name
Grant code / Reference number
Is the source of funding the same sponsor organization/entity?
Yes
Title of funding source
riphah international niversity lahore
Proportion provided by this source
1
Public or private sector
Private
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
university of management and technology lahore
Full name of responsible person
zainab hassan
Position
punjab

Latest degree
Master
Other areas of specialty/work
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Ph.D.
Other areas of specialty/work
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Person responsible for updating data

Contact
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Riphah international university
Full name of responsible person
MUNIBA NAVEED
Position
punjab
Latest degree
Bachelor
Other areas of specialty/work
physiotherapy
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City
lahore
Province
punjab
Postal code
54770
Phone
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Email
munibanaveed1@gmail.com

Sharing plan

Deidentified Individual Participant Data Set (IPD)
Undecided - It is not yet known if there will be a plan to make this available
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