

Soccer and Zumba as health promoting activities among Norwegian hospital employees

Submission date 05/01/2011	Recruitment status No longer recruiting	<input type="checkbox"/> Prospectively registered <input type="checkbox"/> Protocol
Registration date 03/03/2011	Overall study status Completed	<input type="checkbox"/> Statistical analysis plan <input type="checkbox"/> Results
Last Edited 15/03/2011	Condition category Other	<input type="checkbox"/> Individual participant data <input type="checkbox"/> Record updated in last year

Plain English summary of protocol
Not provided at time of registration

Contact information

Type(s)
Scientific

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Additional identifiers

Protocol serial number
N/A

Study information

Scientific Title
Soccer and Zumba as health promoting activities among Norwegian hospital employees: a cluster randomised controlled intervention trial

Study objectives

1. 12 weeks of soccer and Zumba training, respectively, increases the maximal oxygen uptake (VO₂max) and fat oxidation during activity and decreases the systolic and diastolic blood pressure, total body fat mass, fasting insulin, glucose, sensitive C-reactive protein (CRP) and low density lipoprotein (LDL)-cholesterol in the blood compared to the control group
2. 12 weeks of soccer and Zumba training, respectively, increases total body muscle mass, the isometric strength in lower body, coordination (balance), jump height and flexibility in the hamstrings muscles and lower back compared to the control group
3. 12 weeks of soccer and Zumba training, respectively, decreases musculoskeletal pain, kinesiophobia and sickness absence compared to the control group
4. Inflammation, measured as cytokine synthesis in EDTA plasma, increases from before to after a single training session
5. 12 weeks of soccer and Zumba training, respectively, improves the work ability, the individual feeling of wellness and the interpersonal relations in the workplace among the participants compared to the control group
6. After 39 weeks, the maximum oxygen uptake (VO₂max) and the total body muscle mass is higher in the soccer and the Zumba group, respectively, compared to the control group
7. In the time period from 12 to 39 weeks, fewer participants in the Zumba group have dropped out of the study compared to the participants from the soccer group

Ethics approval required

Old ethics approval format

Ethics approval(s)

Regional Committees for Medical and Health Research Ethics (REK), Norway approved on the 13th December 2010 (ref: 2010/2385-8)

Study design

Cluster randomised controlled intervention trial

Primary study design

Interventional

Study type(s)

Quality of life

Health condition(s) or problem(s) studied

Physical activity

Interventions

Participants are randomised in clusters related to their team at the workplace to receive one of the following for 12 weeks:

1. Soccer training: three weekly training sessions of 60 minutes duration offered to the participants
2. Zumba training: three weekly training sessions of 60 minutes duration offered to the participants
3. Control group: participate in the tests and questionnaires

Intervention Type

Other

Phase

Not Applicable

Primary outcome(s)

Maximal oxygen uptake (VO₂max), measured before the intervention (Timepoint 1: Jan 2011), after the intervention period (Timepoint 2: Mar/Apr 2011) and after 39 weeks (Timepoint 3: Sep/Oct 2011)

Key secondary outcome(s)

Measured before the intervention (Timepoint 1: Jan 2011), after the intervention period (Timepoint 2: Mar/Apr 2011) and after 39 weeks (Timepoint 3: Sep/Oct 2011):

1. Systolic and diastolic blood pressure
2. Total body muscle mass and fat mass
3. Inflammation, measured as cytokine synthesis in EDTA plasma
4. Physical capacity, isometric strength, coordination, jump height and flexibility
5. Musculoskeletal pain, kinesiophobia and sickness absence
6. Sensitive CRP and LDL-cholesterol, glucose, insulin

Completion date

31/12/2011

Eligibility**Key inclusion criteria**

1. Hospital employees
2. Aged 25 - 65 years, either sex

Participant type(s)

Patient

Healthy volunteers allowed

No

Age group

Adult

Sex

All

Key exclusion criteria

1. Angina pectoris
2. Pregnancy
3. Life-threatening diseases

Date of first enrolment

10/01/2011

Date of final enrolment

31/12/2011

Locations

Countries of recruitment

Norway

Study participating centre

PO Box 1480

Bodø

Norway

8049

Sponsor information

Organisation

Nordland Hospital Bodø (Norway)

ROR

<https://ror.org/01pj4nt72>

Funder(s)

Funder type

Hospital/treatment centre

Funder Name

Nordland Hospital Bodø (Norway)

Funder Name

University of Nordland, Bodø (Norway)

Funder Name

University of Copenhagen (Denmark)

Alternative Name(s)

university_of_copenhagen, Københavns Universitet - University of Copenhagen, University of Copenhagen (UCPH), Copenhagen University, Københavns Universitet – Københavns Universitet, University of Copenhagen (KU), Denmark, Københavns Universitet – University of Copenhagen (UCPH), koebenhavns_uni, Københavns Uni, University of Copenhagen, KU, UCPH

Funding Body Type

Government organisation

Funding Body Subtype

Universities (academic only)

Location

Denmark

Funder Name

Friskhuset Fitness Centre, Bodø

Funder Name

The municipality of Bodø

Results and Publications

Individual participant data (IPD) sharing plan**IPD sharing plan summary**

Not provided at time of registration

Study outputs

Output type	Details	Date created	Date added	Peer reviewed?	Patient-facing?
Participant information sheet	Participant information sheet	11/11/2025	11/11/2025	No	Yes