ISRCTN61986892 https://doi.org/10.1186/ISRCTN61986892

Soccer and Zumba as health promoting activities among Norwegian hospital employees

Submission date	Recruitment status	[ ] Prospectively registered
05/01/2011	No longer recruiting	[ ] Protocol
Registration date	**Overall study status**	[ ] Statistical analysis plan
03/03/2011	Completed	[ ] Results
Last Edited	**Condition category**	[ ] Individual participant data
15/03/2011	Other	[ ] 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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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 an 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)

Primary study design
Interventional

Study design
Cluster randomised controlled intervention trial

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, Copenhagen University, University of Copenhagen, Denmark, Københavns Uni, UCPH, KU

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