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Can an adjustable workstation reduce occupational sedentary time?

Submission date
13/11/2013

Recruitment status
No longer recruiting

Registration date
09/12/2013

Overall study status
Completed

Last Edited
22/01/2019

Condition category
Musculoskeletal Diseases

[ ] Prospectively registered
[ ] Protocol
[ ] Statistical analysis plan
[X] Results
[ ] Individual participant data

Plain English summary of protocol
Background and study aims
Adjustable workstations offer a potential strategy to decrease prolonged sitting time and break long inactivity in sedentary work. The purpose of this study was to examine the effects of sit-stand workstations on occupational sedentary time, health outcomes and work ability, and their usability in visual display unit (VDU) work.

Who can participate?
Employees of the Faculty of Sport and Health Sciences, University of Jyväskylä, Finland. In September 2012 part of the faculty personnel moved to a renovated building which was furnished with electrically adjustable workstations. Prior to this move, they worked in similarly furnished offices as the faculty members who continued to work in the original buildings, which were equipped with traditional sitting VDU workstations.

What does the study involve?
All faculty employees (n=170) were invited to fill out a questionnaire between August-September 2012 and again in February 2013. Individuals who moved to the renovated building comprised the intervention group (n=23). They used electrically adjustable workstations (ISKU, Finland) during the 6 month intervention period. No other instructions or counseling were given. Faculty personnel who worked in other buildings formed the control group (n=20) and used their original workstations throughout the study.

What are the possible benefits and risks of participating?
Adjustable workstations offer a potential strategy to reduce prolonged sitting in sedentary work.
There is a risk that recruiting enough subjects is difficult, but we have made the study simple which makes participation more attractive. Further, to find workplaces that have or are in the process of purchasing electrically adjustable workstations we will approach both workplaces and manufacturers in order to obtain enough subjects for the intervention study.

Where is the study run from?
This study was carried out at the Faculty of Sport and Health Sciences, University of Jyväskylä, Finland

When is the study starting and how long is it expected to run for?
August 2012 to February 2013

Who is funding the study?
University of Jyväskylä (Finland). PhD student is supported by China Scholarship Council (CSC).

Who is the main contact?
Prof. Taija Juutinen Finni
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Contact information

Type(s)
Scientific

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Additional identifiers

EudraCT/CTIS number

IRAS number

ClinicalTrials.gov number

Secondary identifying numbers
N/A

Study information

Scientific Title
Can an adjustable workstation reduce occupational sedentary time: a controlled intervention study

Study objectives
1. It is hypothesized that the intervention-induced changes will be positively associated with reduced occupational sedentary time in a real workplace.
2. The sit-stand workstations offer the possibility to improve health indexes and improve work ability.
3. There is a high usability of the sit-stand workstations in visual display unit (VDU) work.

Ethics approval required

Old ethics approval format

Ethics approval(s)
Ethics Committee of University of Jyväskylä, 19/10/2012

Study design
Controlled intervention with one intervention group and one control group

Primary study design
Interventional

Secondary study design
Non randomised controlled trial

Study setting(s)
Other

Study type(s)
Quality of life

Participant information sheet
Not available in web format, please use the contact details provided in the Interventions field to request a patient information sheet

Health condition(s) or problem(s) studied
Ergonomics interventions on sedentary work

Interventions
1. Intervention group: all faculty employees who moved to the renovated building comprised the intervention group. The intervention group used electrically adjustable workstations during the 6-month intervention period. They were given brief verbal instructions on how to operate the workstation without other instructions or counseling.
2. Control group: faculty personnel who worked in other buildings formed the control group and used their original workstations throughout the study.

Intervention Type
Other

Phase
Not Applicable

Primary outcome measure
Occupational sedentary time in VDU work: values correspond to the percentage of work time spent sitting and standing, the percentage of computer work time spent sitting and standing, and average leisure sitting time. Measured at baseline and at 6 months.

Secondary outcome measures
Measured at baseline and at 6 months:
1. Health and work-related outcomes: mean perceived musculoskeletal comfort for different

body parts and mean perceived work ability
2. In the intervention group, self-reported usability of the sit-stand workstation including adjustability, satisfaction and usage level of sit-stand function

Overall study start date
01/08/2012

Completion date
28/02/2013

Eligibility

Key inclusion criteria
1. All faculty employees (researchers, teachers, administrative workers, assistants, professors and technical workers)
2. Ambulatory
3. Non-pregnant
4. ≥0.8 full-time equivalent

Participant type(s)
Patient

Age group
Adult

Sex
Both

Target number of participants
170 faculty employees

Key exclusion criteria
1. Self-reported chronic, long-term musculoskeletal disease or progressive neurological disease
2. Diagnosed cardiovascular or metabolic disease with regular medication

Date of first enrolment
01/08/2012

Date of final enrolment
28/02/2013

Locations

Countries of recruitment
Finland

Study participating centre

PO Box 35
Jyväskylä
Finland
40014

Sponsor information

Organisation
University of Jyväskylä (Finland)

Sponsor details
Neuromuscular Research Center
Department of Biology of Physical Activity
PO Box 35
Jyväskylä
Finland
40014

Sponsor type
University/education

Website
https://www.jyu.fi/en

ROR
https://ror.org/05n3dz165

Funder(s)

Funder type
University/education

Funder Name
China Scholarship Council (China) (No. 201206320092)

Alternative Name(s)
CSC

Funding Body Type
Government organisation

Funding Body Subtype
National government

Location
China

Funder Name
University of Jyväskylä (Finland) was responsible for expenses of the environmental intervention

Results and Publications

Publication and dissemination plan
Not provided at time of registration

Intention to publish date

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?
Results article	results	01/09/2016	22/01/2019	Yes	No