

Can an adjustable workstation reduce occupational sedentary time?

Submission date 13/11/2013	Recruitment status No longer recruiting	<input type="checkbox"/> Prospectively registered
		<input type="checkbox"/> Protocol
Registration date 09/12/2013	Overall study status Completed	<input type="checkbox"/> Statistical analysis plan
		<input checked="" type="checkbox"/> Results
Last Edited 22/01/2019	Condition category Musculoskeletal Diseases	<input type="checkbox"/> 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
taija.finni@jyu.fi

Contact information

Type(s)
Scientific

Contact name
Prof Taija Juutinen Finni

Contact details
PO Box 35
Jyväskylä
Finland
40014

Additional identifiers

Protocol serial number
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

Study type(s)

Quality of life

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(s)

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.

Key secondary outcome(s)

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

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

Healthy volunteers allowed

No

Age group

Adult

Sex

All

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)

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

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
Participant information sheet	Participant information sheet	11/11/2025	11/11/2025	No	Yes