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Walks4work: Investigating walking at lunchtime in the workplace

Submission date
26/04/2012

Recruitment status
No longer recruiting

Registration date
22/05/2012

Overall study status
Completed

Last Edited
26/11/2015

Condition category
Mental and Behavioural Disorders

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

Plain English summary of protocol

Background and study aims
The aim of the study was to assess the effect of walking in reducing the effects of workplace stress which is related to the risk of developing cardiovascular disease (CVD). For example altered heart rate response to stress, high blood pressure, Body Mass Index (BMI). Further to this, the study aimed to assess whether the environment in which the lunchtime walk took place could impact the results of the study.

Who can participate?
Participants ranged in age from 18 to 65 years. Participants were required to be healthy, that is free from any cardiovascular or neurological disease and not receiving medication that could affect either system. Participants also needed to be able to take part in fairly intense exercise.

What does the study involve?
This study consisted of an 8-week study period. During this time participants were randomly allocated to one of three groups. The groups were two lunchtime walking group and one control group. The first walking group consisted of a 2km nature route. The other walking group consisted of is a 2km route that is predominantly a built environment. Participants allocated to these groups were required to walk their given route twice a week during two separate lunch breaks. The third group was a waiting-control group who were required to continue with their regular lunchtime activities. Those in the waiting control group will be given access to the walking routes at the end of the 8 week intervention period. Following this period participants were able to walk in either environment and as many times as they wished as long as it was during their lunch break. Walking habits were recorded by the participants and primary and secondary outcome measures were assessed again after 3 months. Collection of activity diaries finished in December 2011.

What are the possible benefits and risks of participating?
Expected improvements in health and well-being. There was a small risk of injury when walking around the prescribed walking routes however a full risk assessment was carried out prior to the start of the study and participants were advised on how to minimise these risks e.g. appropriate footwear and notifying a colleague when leaving for a walk.

Where is the study run from?
Centre for Sport and Exercise Science (CSES), University of Essex

When is the study starting and how long is it expected to run for?
April 2011 to December 2011.

Who is funding the study?
The Economic and Social Research Council and the British Heart Foundation

Who is the main contact?
Dr Valerie Gladwell
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Contact information

Type(s)
Scientific

Contact name
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Additional identifiers

EudraCT/CTIS number

IRAS number

ClinicalTrials.gov number

Secondary identifying numbers
N/A

Study information

Scientific Title
Walks4work: Rationale and study design to investigate walking at lunchtime in the workplace setting

Study objectives
1. After 8 weeks the walking groups would show improved response and recovery of heart rate and vagal tone to acute stress as compared to the waiting control group

2. The walk in the nature environment would improve heart rate response and recovery to an acute stress as compared to the built environment condition

Ethics approval required
Old ethics approval format

Ethics approval(s)
Cambridgeshire NHS Research Ethics Committee, 21/10/2010, ref: 10/H0305/66

Study design
Randomised waiting-control group trial

Primary study design
Interventional

Secondary study design
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 below to request a patient information sheet

Health condition(s) or problem(s) studied
Modifying workplace stress

Interventions
Participants were assigned to a natural walking environment (n = 32) vs. built walking environment (n = 33) vs. waiting-control group (n = 29) for an 8 week period. Following this all participants, including the waiting control group, were given the option of walking either of the two routes when walking at lunchtime. This stage of the study lasted for 3 months following the 8-week intervention period.

Intervention Type
Behavioural

Primary outcome measure
1. Heart rate responses to and recovery from a stressor
2. Changes in vagal activity over the stressor and in recovery measured using the high frequency component of heart rate variability (HRV) analysis

Secondary outcome measures
1. Levels of lunchtime physical activity
2. An objective biomarker of stress, cortisol
3. Subjective ratings of stress and mental health assessed using questionnaires, which were SF-8, Perceived stress scale, work engagement, job satisfaction, Rosenburg's self-esteem and the

positive and negative affect scale
4. Changes in physical cardiovascular risk factors of blood pressure, body mass index, heart rate variability, waist circumference, and predicted aerobic fitness

Overall study start date
16/04/2011

Completion date
16/12/2011

Eligibility

Key inclusion criteria
1. Aged between 18 - 65 years old
2. Healthy
3. Able to participate in fairly intense exercise

Participant type(s)
Patient

Age group
Adult

Lower age limit
18 Years

Sex
Both

Target number of participants
94

Key exclusion criteria
1. Participants outside of give age range
2. Those with cardiovascular and/or neurological conditions or taking medication which affect either of these systems
3. Anyone who cannot participate in fairly intense exercise

Date of first enrolment
16/04/2011

Date of final enrolment
16/12/2011

Locations

Countries of recruitment
England

United Kingdom

Study participating centre
University of Essex
Colchester
United Kingdom
CO4 3SQ

Sponsor information

Organisation
Economic and Social Research Council (UK)

Sponsor details
Polaris House
North Star Avenue
Swindon
United Kingdom
SN2 1UJ

Sponsor type
Research council

Website
http://www.esrc.ac.uk/

Organisation
British Heart Foundation

Sponsor details
Greater London House
180 Hampstead Road
London
United Kingdom
NW1 7AW

Sponsor type
Charity

Organisation
Economic and Social Research Council

Sponsor details

Sponsor type
Government

Website
http://www.esrc.ac.uk/

ROR
https://ror.org/03n0ht308

Funder(s)

Funder type
Research council

Funder Name
Economic Social Research Council (UK) - Early career fellowship ref: RES-064-27-0019)

Funder Name
British Heart Foundation (UK) - Non-clinical PhD studentship ref: FS/10/32/28204

Alternative Name(s)
the_bhf, The British Heart Foundation, BHF

Funding Body Type
Private sector organisation

Funding Body Subtype
Trusts, charities, foundations (both public and private)

Location
United Kingdom

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?
Protocol article	protocol	25/07/2012		Yes	No
Results article	results	01/07/2014		Yes	No