

Managing cigarette cravings using the Physical over Smoking (PoS) App

Submission date 17/02/2015	Recruitment status No longer recruiting	☐ Prospectively registered ☒ Protocol
Registration date 25/02/2015	Overall study status Completed	☐ Statistical analysis plan ☒ Results
Last Edited 30/05/2017	Condition category Mental and Behavioural Disorders	☐ Individual participant data

Plain English summary of protocol

Background and study aims

Research evidence on smokers show that even relatively small doses of exercise can help to manage cigarette cravings and withdrawal symptoms. A smartphone application named Physical over Smoking (PoS) has been developed to support quitters to manage cigarette cravings by counter-suggesting short exercises, tailored to participants' information (gender, age etc) and current status (place, mood and social environment). The aim of this study is to test how well the PoS App works in a group of adult smokers who have recently quit smoking in comparison to a group of non users of the App.

Who can participate?

Adults with no other addictions or mental and physical problems who are addicted to cigarettes and want to quit smoking.

What does the study involve?

All participants receive a short quit smoking counselling program and then they are randomly allocated to one of two groups. One group uses the PoS App when experiencing cigarette cravings as an aid to overcome the urge. The other group do not receive any after quit support. Both groups are followed up for 6 months after quit day.

What are the possible benefits and risks of participating?

All participants benefit from the free counselling quit smoking program. There are no risks or any kind of harm involved.

Where is the study run from?

University of Jyväskylä (Finland)

When is the study starting and how long is it expected to run for?

February 2014 to December 2015

Who is funding the study?

National Institute for Health and Welfare (Finland)

Who is the main contact?

Mary Chasandra

Contact information

Type(s)

Public

Contact name

Dr Mary Chasandra

Contact details

Faculty of Sport and Health Sciences

Department of Sport Sciences

PO Box 35

Jyvaskyla

Finland

40014

Additional identifiers

Study information

Scientific Title

Effectiveness of a smartphone application on long term abstinence, awareness, efficacy and power of control of cigarette cravings of adult smokers: a two-arm superiority randomised controlled trial

Study objectives

1. Users of the PoS App will have higher abstinence rates at follow up measures in comparison to the control group
2. Users of the PoS App will report higher efficacy on being aware of experiencing cravings compared to the control group
3. Users of the PoS App will report higher efficacy on managing cravings compared to the control group
4. Users of the PoS App will report higher power of control to manage cravings compared to the control group

Ethics approval required

Old ethics approval format

Ethics approval(s)

Central Finland Health Care District's Ethics Committee (Keski-Suomen sairaanhoitopiirin eettinen toimikunta), 14/10/2014 (no ref number)

Primary study design

Interventional

Study design

Two-arm intervention single-center parallel superiority pragmatic randomized controlled trial

Study type(s)

Treatment

Health condition(s) or problem(s) studied

Tobacco smoking

Interventions

Participants identified as eligible and agreed to participate will receive a quit smoking counselling program. The program will consist of 3 motivational interviewing 2 hours weekly sessions. After they set their quit smoking day they will be randomly assigned to the experimental group (after quit support by using the Physical over Smoking App for managing their cravings) or to the control group (no after quit support) and have a 4th meeting. All participants will be followed for 6 months after the 4th meeting.

Intervention Type

Mixed

Primary outcome(s)

1. Self report of tobacco use at a. before quit day; b. 1 & 2 & 3 weeks after 4th meeting; c. 1 & 3 & 6 months after 4th meeting. Cotinine in saliva measured at 4th meeting
2. Self report of efficacy on being aware of experience cravings at a. before quit day; b. 1 & 2 & 3 weeks after 4th meeting; c. 1 & 3 & 6 months after 4th meeting
3. Self report of efficacy on managing cravings at a. before quit day; b. 1 & 2 & 3 weeks after quit; c. 1 & 3 & 6 months after quit
4. Self report of power of control to manage cravings at a. before quit day; b. 3 days after, c. 1 & 3 & 6 months after quit

Key secondary outcome(s)

1. Self-reported current physical activity behavior (IPAQ) a. before quit day; b. 3 & 6 months after 4th meeting. 3 days measurement of step counts (pedometer) at before quit day time point
2. Self-reported attitudes, intentions and perceived behavioural control of quit smoking at before quit day time point
3. Self-reported attitudes, intentions and perceived behavioural control of craving management at a. before quit day; b. 4th meeting
4. Self-reported attitudes, intentions and perceived behavioural control of increase physical activity behavior at a. before quit day; b. 4th meeting
5. Self-reported Usability of the Physical over Smoking App from experimental group only at a. 1 week; b. 1 month, 3 months & 6 months after 4th meeting
6. Fidelity checks in both groups at a. 3 days after 4th meeting and b. 1 week; c. 1 month, 3 months & 6 months after 4th meeting

Completion date

31/12/2015

Eligibility

Key inclusion criteria

Adult smokers

Participant type(s)

Patient

Healthy volunteers allowed

No

Age group

Adult

Sex

All

Key exclusion criteria

1. Patients with additional addictions (alcohol, drugs, etc) according to NIDA screening tool
2. High scores of active psychological distress according to GHQ-12: if scores 20+ on a scale from 0 to 36.
3. Low scores on Tobacco Dependence Screener (TDS): less than 5 on a scale from 1 to 10
4. Low scores on Motivation to stop smoking scale: less than 3 on a scale from 1 to 7
5. Health risks by increasing physical activity according to the screening tool of PAR-Q

Date of first enrolment

01/12/2014

Date of final enrolment

01/05/2015

Locations**Countries of recruitment**

Finland

Study participating centre

JYTE; Jyväskylä Community Primary Health Care Center: Palokan terveystasema

Ritopohjantie 26

Jyväskylä, Palokka

Finland

40270

Sponsor information**Organisation**

University of Jyväskylä

ROR

<https://ror.org/05n3dz165>

Funder(s)

Funder type

Government

Funder Name

National Institute for Health and Welfare (TERVEYDEN JA HYVINVOINNIN LAITOS)

Results and Publications

Individual participant data (IPD) sharing plan

The datasets generated during and/or analysed during the current study are/will be available upon request from Mary Chasandra.

IPD sharing plan summary

Available on request

Study outputs

Output type	Details	Date created	Date added	Peer reviewed?	Patient-facing?
Results article	results	26/05/2017		Yes	No
Protocol article	protocol	22/10/2015		Yes	No
Basic results		17/01/2017	27/01/2017	No	No