Trial of physical activity for smoking cessation during pregnancy

Submission date	Recruitment status	[X] Prospectively registered		
17/07/2008	No longer recruiting	[X] Protocol		
Registration date	Overall study status	Statistical analysis plan		
21/07/2008	Completed	[X] Results		
Last Edited 19/01/2017	Condition category Mental and Behavioural Disorders	Individual participant data		

Plain English summary of protocol

Background and study aims

We are carrying out a study of pregnant smokers to see if exercise can help pregnant women stop smoking. To do this we will compare the effect on quit rates at end of pregnancy for two treatments:

- 1. Usual stop smoking support
- 2. Usual stop smoking support plus a physical activity intervention

Who can participate?

Pregnant women who currently smoke at least one cigarette a day and least five cigarettes daily before pregnancy, are 10-24 weeks into their pregnancy, are motivated to quit smoking, and are aged 16-50 years.

What does the study involve?

Participants will be allocated to one of two groups. One group will receive 6 sessions of stop smoking support and the other group will receive this stop smoking support plus 14 physical activity sessions (involving exercise on a treadmill and counselling about increasing physical activity levels).

What are the possible benefits and risks of participating?

The benefit of participating would be that you receive one-to-one advice on how to stop smoking which will increase your chances of stopping smoking. Information from this study may help other pregnant women to stop smoking. Unless you have been advised by your doctor or midwife not to take exercise, there are no disadvantages and risks of taking part. If you have been advised by your doctor or midwife not to take exercise you will not be able to take part.

Where is the study run from?

The study is run from St George's University of London, who are sponsoring the trial. Recruitment, however, takes place at 12 UK hospitals:

- 1. St George's, London
- 2. Epsom & St Helier
- 3. Croydon University Hospital
- 4. Kingston

- 5. Imperial (St Mary's, Hammersmith, Chelsea & Queen Charlottes)
- 6. Chelsea & Westminster
- 7. Guys & St Thomas'
- 8. Crawley
- 9. Kings College London
- 10. Medway Maritime Hospital
- 11. West Middlesex University Hospital
- 12. Leighton Hospital, Mid-Cheshire Hospital Trust

When is the study starting and how long is it expected to run for? Recruitment started in April 2009 and we aim to finish recruiting by November 2012. We will follow-up participants at the end of their pregnancy and six months after to check their progress. We aim to finish this by July 2013.

Who is funding the study? National Institute of Health Research Health Technology Assessment (NIHR HTA) programme

Who is the main contact? Dr Michael Ussher mussher@squl.ac.uk

Contact information

Type(s)

Scientific

Contact name

Dr Michael Ussher

Contact details

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Additional identifiers

EudraCT/CTIS number

IRAS number

ClinicalTrials.gov number

Secondary identifying numbers HTA 07/01/14

Study information

Scientific Title

Pragmatic randomised controlled trial of physical activity as an aid to smoking cessation during pregnancy

Acronym

LEAP (London Exercise And Pregnant smokers) Trial

Study objectives

This study is assessing whether taking part in a physical activity programme enhances rates of smoking abstinence at end of pregnancy.

More details can be found at: https://www.journalslibrary.nihr.ac.uk/programmes/hta/070114/#/

Ethics approval required

Old ethics approval format

Ethics approval(s)

Wandsworth LREC, 14/10/2008, ref: 08/H0803/177

Study design

Pragmatic randomised controlled trial

Primary study design

Interventional

Secondary study design

Randomised controlled trial

Study setting(s)

Other

Study type(s)

Prevention

Participant information sheet

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

Health condition(s) or problem(s) studied

Smoking addiction

Interventions

Physical activity intervention: 14 sessions of supervised exercise (30 mins of brisk walking on a treadmill) plus physical activity counselling over 8 weeks plus 6 sessions of behavioural support for smoking cessation over 6 weeks.

Control: Six sessions of behavioural support for smoking cessation over 6 weeks

Intervention Type

Behavioural

Primary outcome measure

Prolonged smoking abstinence at end of pregnancy validated by expired CO and saliva cotinine

Secondary outcome measures

- 1. Reports of physical activity, recorded throughout treatment, at end of pregnancy and six months after birth
- 2. Withdrawal symptoms, assessed during treatment
- 3. Desire to smoke, assessed during treatment
- 4. Self-efficacy for physical activity and for quitting smoking, assessed throughout treatment, at end of pregnancy and six months after birth
- 5. Depression, measured by the Edinburgh Post-natal Depression Scale throughout treatment, at end of pregnancy and six months after birth
- 6. Weight/ body mass index (BMI), assessed throughout treatment, at end of pregnancy and six months after birth

Overall study start date

01/02/2009

Completion date

30/04/2013

Eligibility

Key inclusion criteria

- 1. Pregnant women, no more than 24 weeks pregnant
- 2. 16 to 50 years of age
- 3. Currently smoking at least one cigarette a day
- 4. Report smoking at least ten cigarettes daily before pregnancy
- 5. Motivated to guit smoking

Participant type(s)

Patient

Age group

Adult

Sex

Female

Target number of participants

866

Key exclusion criteria

1. Injury or illness that might be exacerbated by exercise. If they have been advised by their doctor or midwife not to take exercise during pregnancy or if they have any cautions for taking

exercise a consultant Obstetrician and Gynecologist at their hospital will be consulted to check that it is safe for them to take part in the trial

2. Women who wish to use nicotine replacement therapy (NRT)

Date of first enrolment

01/04/2009

Date of final enrolment

01/11/2012

Locations

Countries of recruitment

England

United Kingdom

Study participating centre
St George's University of London
London
United Kingdom
SW17 ORE

Study participating centre
Epsom and St Helier University Hospitals NHS Trust
Surrey
United Kingdom
SM5 1AA

Study participating centre Croydon University Hospital Surrey United Kingdom CR7 7YE

Study participating centre Kingston Hospital Kingston upon Thames United Kingdom KT2 7QB

Study participating centre Imperial College Healthcare NHS Trust (St Mary's, Hammersmith, Chelsea & Queen Charlotte's)

London United Kingdom W2 1NY

Study participating centre Chelsea and Westminster Hospital

London United Kingdom SW10 9NH

Study participating centre Guy's and St Thomas' NHS Foundation Trust London United Kingdom SE1 7EH

Study participating centre Crawley Hospital Crawley United Kingdom RH11 7DH

Study participating centre King's College Hospital London United Kingdom SE5 9RS

Study participating centre Medway Maritime Hospital Gillingham United Kingdom ME7 5NY

Study participating centre West Middlesex University HospitalMiddlesex

Study participating centre Leighton Hospital, Mid-Cheshire Hospital Trust Cheshire United Kingdom CW1 4QJ

Sponsor information

Organisation

St George's, University of London (UK)

Sponsor details

Cranmer Terrace London England United Kingdom SW17 0RE +44 (0)20 8725 5000 awithers@sgul.ac.uk

Sponsor type

University/education

Website

http://www.sgul.ac.uk

ROR

https://ror.org/040f08y74

Funder(s)

Funder type

Government

Funder Name

Health Technology Assessment Programme

Alternative Name(s)

NIHR Health Technology Assessment Programme, HTA

Funding Body Type

Government organisation

Funding Body Subtype

National government

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	04/10/2012		Yes	No
Results article	results	14/05/2015		Yes	No
Results article	results	01/10/2015		Yes	No
Other publications	process evaluation	17/01/2017		Yes	No