# **Dundee Family Health Study**

Submission date	Recruitment status  No longer recruiting	[X] Prospectively registered		
04/12/2017		[X] Protocol		
Registration date 10/12/2017	Overall study status Completed	Statistical analysis plan		
		[X] Results		
Last Edited	Condition category	[] Individual participant data		
05/10/2020	Nutritional, Metabolic, Endocrine			

#### Plain English summary of protocol

Background and study aims

Play, sleep routine and family meals are known to be important for the overall health and wellbeing of young children, some studies have shown positive changes in these habits at nursery and school and that this makes a difference to the future health of the children. The Dundee Family Health Study aims to offer families with a child aged 2-5 years (pre-school), living in Dundee, an opportunity to build healthy family lifestyles linked to 4 behaviours or habits; PLAY and ACTIVITY, SLEEP ROUTINE, SCREEN TIME and FAMILY MEALS. The study takes place in families own homes and aims to understand if involvement in the study makes a difference to everyday routines and to the health of families.

#### Who can participate?

Children aged 2-5 year and their families, living in Dundee, Scotland.

### What does the study involve?

For families who sign-up to be involved in this study, the researcher will visit the family home and use measures such as questionnaires and small pedometer type devices to record play, sleep routine, screen time and family meals. Families are randomly allocated to one of two groups. Those in the first group get 'a lot' of the programme. Those in the second group get 'a little' of the programme. Families receive supermarket gift vouchers at the beginning and again at the end of the study. The maximum number of visits is 7 over 6month and the least number of visits is 2 during a 6 month period.

What are the possible benefits and risks of participating?

The results will show if participation in the Dundee Family Health Study is beneficial to children and families in terms of physical activity, active play, family mealtimes, sleep routine and sedentary behaviour. There is no serious risk involved in participation in the study.

Where is the study run from? University of Strathclyde (UK)

When is the study starting and how long is it expected to run for? October 2016 to February 2019

Who is funding the study?
The Hannah Research Foundation (UK)

Who is the main contact?

Jenny Gillespie (Public)

Jenny.gillespie@strath.ac.uk

#### Study website

www.dfhstudy.com

# **Contact information**

#### Type(s)

Public

#### Contact name

Mrs Jenny Gillespie

#### Contact details

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# Additional identifiers

EudraCT/CTIS number

**IRAS** number

ClinicalTrials.gov number

Secondary identifying numbers N/A

# Study information

#### Scientific Title

Translation of Healthy Habits, Happy Homes early childhood obesity prevention intervention to families in Scotland: Feasibility Trial

## **Study objectives**

It is hypothesized that participation in the intervention will see improvements to time spent being physically active (active play), families eating together at mealtimes, sleep routine and a reduction in sedentary behaviour when compared to controls.

#### Study aims:

The primary aim is to determine if a full-scale efficacy trial of the adapted Healthy Habits Happy Homes study will be feasible and acceptable with families who live in more deprived communities in Scotland. This will involve an investigation of the following: testing a coproduction approach to adaptation of study materials and development of promotional materials, the percentage of participant families who complete baseline and follow-up measures, appropriateness and practicality of the methods for obtaining outcome measures, acceptability of the intervention duration, content and delivery.

#### Ethics approval required

Old ethics approval format

#### Ethics approval(s)

The University of Strathclyde School of Psychological Sciences and Health Ethics Committee, 12 /10/2017

#### Study design

Feasibility randomised trial

#### Primary study design

Interventional

#### Secondary study design

Randomised controlled trial

#### Study setting(s)

Home

#### Study type(s)

Prevention

#### 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

Obesity, sedentary behaviour (at home), physical activity (at home), sleep (at home), family meals.

#### **Interventions**

This study, Dundee Family Health study (www.dfhstudy.com), adapts the original Healthy Habits Happy Homes (HHHH) home-based obesity prevention intervention for Scotland. The original HHHH study was used mainly in Latino families in Boston, USA and the feasibility of the intervention in Scotland needs to be determined.

Recruitment of around 40 participant families is expected. Families who live in a defined area within the North East area of Dundee City, with postcodes that are defined by the Scottish Index

of Multiple Deprivation (SIMD) from the three most deprived quintiles are eligible to sign up to the study. A co-production approach is used for development and design of posters and fliers to promote recruitment of families to the study which will include a description of study design and incentives that is acceptable to the target group. These posters and fliers are placed in family friendly venues (community centres, libraries, toddler groups) and posted on local social media sites recommended by workers, parents and families.

The researcher contacts interested families and applies an eligibility questionnaire to assess suitability of families. For families that have given written consent for the study, baseline data collection is completed. Physical activity is measured over 4 consecutive days (using the ActivPAL accelerometer) as is night-time sleep. Anthropometric measures of height, weight, and body composition (as measured by bioelectrical impedance) are taken at home.

Following baseline measures, families are then randomised to receive either the control or intervention arm. Families receive an incentive (a grocery voucher) for completion of baseline data and again when the measures are repeated at the six month follow up.

Families randomised to the intervention group (n=20) receive 4 visits to the family home over the space of 6 months. The visits use a motivational interviewing approach to support the families to make positive lifestyle changes linked to the 4 key health behaviours of sleep, physical activity, screen time and family meal routine.

Families randomised to the control group (n=20) receive/ emailed general healthy lifestyle information linked to sleep routine, family meals, physical activity and screen time.

#### Intervention Type

Behavioural

#### Primary outcome measure

- 1. BMI z-score is measured using height and weight measured at baseline and 6months
- 2. Physical activity is measured using the activPal accelerometer to be worn at baseline for five consecutive days and at 6 month again for five consecutive days
- 3. Sedentary behaviour is measured using the activPal accelerometer to be worn at baseline for five consecutive days and at 6 month again for five consecutive days
- 4. Acceptability issues is measured qualitatively using Semi-structured interviews or focus groups with parents (answering the questions: What is the acceptability of the intervention, and family views on enhancing acceptability? What is the acceptability of the trial procedures and outcome measures?) at 6month follow up

### Secondary outcome measures

- 1. Sleep is measured using the activPal accelerometer at baseline and follow-up
- 2. Body composition (bio-electrical impedance) is measured using the Bodystat 1500 at baseline and follow-up
- 3. Family eating meals together is measured by parental questionnaire at baseline and follow-up
- 4. Screen time is measured by self report through parental questionnaire at baseline and follow up
- 5. Health related Quality of Life (HRQOI) is measured through PedsQL at baseline and follow up

# Overall study start date

01/10/2016

#### Completion date

30/09/2019

# Eligibility

#### Key inclusion criteria

- 1. Male or female
- 2. Pre-school children, aged 2-5 years old
- 3. Live in Dundee
- 4. Parental consent provided

#### Participant type(s)

Healthy volunteer

#### Age group

Mixed

#### Sex

Both

#### Target number of participants

We aim to recruit 40 participant families (20 intervention, 20 control)

#### Total final enrolment

26

#### Key exclusion criteria

Participants' families where English language is not spoken.

#### Date of first enrolment

11/12/2017

#### Date of final enrolment

31/10/2018

# Locations

#### Countries of recruitment

Scotland

United Kingdom

# Study participating centre University of Strathclyde (Scotland)

Physical Activity for Health Group School of Psychological Science Graham Hills Building 50 George Street

# Sponsor information

#### Organisation

Univeristy of Strathclyde

#### Sponsor details

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#### Sponsor type

University/education

#### **ROR**

https://ror.org/00n3w3b69

# Funder(s)

# Funder type

Charity

#### **Funder Name**

Hannah Research Foundation

# **Results and Publications**

#### Publication and dissemination plan

A protocol paper outlining intervention development and the methodology will be submitted to an international journal for publication in early 2018. Full results of the feasibility RCT will also be submitted for publication to an international journal in the field of public health.

# Intention to publish date

30/09/2020

# Individual participant data (IPD) sharing plan

The data sharing plans for the current study are unknown and will be made available at a later date.

## IPD sharing plan summary

Data sharing statement to be made available at a later date

## **Study outputs**

Output type	Details	Date created	Date added	Peer reviewed?	Patient-facing?
<u>Protocol article</u>	protocol	07/06/2019	09/06/2020	Yes	No
Results article	results	01/11/2020	05/10/2020	Yes	No