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A preschool intervention to improve child and family health behaviours

Submission date
13/02/2017

Recruitment status
No longer recruiting

Registration date
16/02/2017

Overall study status
Completed

Last Edited
20/10/2017

Condition category
Mental and Behavioural Disorders

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

Plain English summary of protocol

Background and study aims
One in five children starting school in England is now overweight or obese. Currently, there is a lack of programs with the aim of preventing obesity in preschool-age children in the UK. Previous research has revealed some positive results in changing some health behaviours related to obesity, such as diet and physical activity. However, overall numbers of obesity continue to rise in some age groups and social backgrounds. It has been suggested that preschool settings such as nursery schools may provide opportunities for promoting healthy lifestyles and also to develop and test behaviour-change programs. 'The Study of Kids in Preschool' (SKIP) is a behaviour-change preschool program aimed at improving families eating and encourage families to be more active. The aim of this study is to test whether the nursery staff and parents of preschool children are willing to complete the data collection measures and an intervention to improve health behaviours such as diet and physical activity.

Who can participate?
Families with a preschool child (3-5 years) who attend participating school.

What does the study involve?
Schools are randomly allocated to either receiving the programme or being placed on the waiting list. At the beginning of the programme, parents provide information about their child's activity level, eating habits, height and weight. Children are given cameras to take pictures of what they eat and drink every day for four days. The programme involves five monthly sessions as well as an introduction for parents. These sessions try to increase physical activity by teaching about healthy eating, healthy behaviours and healthy activity. Parents are given monthly newsletters that include information about healthy eating and ideas on how to get their kids to be more active. Parents also set monthly goals with the school staff in order to continue to make healthy choices with their children at home. At the end of the programme, children are given cameras again to take pictures of what they eat and drink for four days. Schools on the waiting list continue as normal during the study and are given the opportunity to participate in the program six months after the programme has ended.

What are the possible benefits and risks of participating?
Participants may benefit from possibly making changes to the family diet and activity and

promoting healthy living. There is a risk that participants may feel pressured to complete the monthly tasks or feeling judged if they were not able to.

Where is the study run from?
Four primary schools located in the North-East of England (UK)

When is the study starting and how long is it expected to run for?
February 2010 to July 2012

Who is funding the study?
Fuse, the Centre for Translational Research in Public Health (UK)

Who is the main contact?
Lorraine McSweeney
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Contact information

Type(s)
Scientific

Contact name
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Additional identifiers

Protocol serial number
PhD02

Study information

Scientific Title
A feasibility study with process evaluation of a preschool intervention to improve child and family lifestyle behaviours

Study objectives

Preschool settings may provide valuable opportunities to access children and their families not only for promoting healthy lifestyles, but also to develop and evaluate behaviour-change interventions.

Ethics approval required
Old ethics approval format

Ethics approval(s)
Newcastle University Faculty of Medical Science Ethics Committee, 09/06/2011, ref: 00303_1

Primary study design
Interventional

Study design
Cluster randomised feasibility trial

Study type(s)
Other

Health condition(s) or problem(s) studied
Lifestyle behaviour change

Interventions
Four local government preschool centres associated with primary schools in the North East of England consent to participate and are randomised to either the intervention or wait list control groups. In order to reduce selection bias the preschools were allocated to intervention or wait list control by a computerised programme by the Newcastle University Clinical Trials Unit.

Intervention group: Families who agree to take part are asked to provide information about their child's diet (how often their child watched TV/DVDs, how active their child was and whether the family took part in activities such as walking, swimming etc). This information is recorded in a diary completed by the parents over 4 days before the start of the project and at the end to see if there were any changes. The child's height and weight are also recorded. To include children in the gathering of information about their diet, they are given disposable cameras and asked to take photographs of everything they ate and drank for four days at the beginning and end of the project. This also provided more information about the child's diet.

The participating schools receive the intervention titled the Study of Kids in Preschool' (SKIP) which consists of five monthly modules plus an introductory session for parents. The five monthly preschool-based sessions target the child and aim at increasing physical activity, knowledge of and prompting of healthy eating. Active Behaviour Change Techniques delivered by the preschool staff provide information on modelling and demonstrating behaviour, prompting practice and providing instruction on how to perform the behaviour.

Parents are given monthly newsletters by preschool staff. These newsletters provide dietary and physical activity information and tips for home-based tasks to increase physical activity and healthy eating and decrease screen time. Active Behaviour Change Techniques distributed via the newsletters are self-monitoring of behaviour, goal setting, action planning and coping planning.

Parents are asked to meet with preschool staff members once a month to set goals, monitor and review family health behaviour using written materials provided within the newsletters. The families are encouraged to share ideas, achievements, photographs and drawings of activities on a communal preschool information board. Home-based tasks include family cooking and tasting, 'No TV day' and increasing family 'active time' challenges.

Control group: Schools are placed on a wait-list and continue as usual for the duration of the study and are given the opportunity to participate six months after the study.

Intervention Type
Behavioural

Primary outcome(s)
Feasibility of trial procedures and acceptability of the proposed intervention are measured through:
1. Recruitment rates (the number of eligible participants who consent to participate in the study) at baseline
2. Completion rates of data collection tasks by parents such as completion of food diaries including recording of child accelerometer/pedometer use, recording time of child TV viewing and recording of family active time at baseline and 6 months
3. Lost to follow-up (parents) measured by the number of parents who consent to participate that remain in the study until the end of follow-up at 6 months
4. Adherence to the proposed activities by preschools and parents (i.e. number of worksheets, feedback forms and questionnaires received from nursery staff and parents during the duration of the study) at 6 months
5. Number of pictures taken by children/families of meals consumed at baseline and 6 months

Key secondary outcome(s)
Children:
1. Height and weight are measured using a Leicester portable height measure with the head in the Frankfort plane, and Tanita scales TBF-300MA at baseline and 6 months
2. Physical activity is measured by either Actigraph GT1M accelerometer or ST-101 pedometer at baseline and 6 months
3. Portion size and eating environment (home, school, restaurant, with family alone etc.) are assessed by photographs taken with a digital camera provided to children and food diaries at baseline and 6 months

Parents:
1. Child eating behaviours are assessed using four day food diaries collected at baseline and 6 months
2. Sedentary behaviours are assessed by recording the time in hours/minutes children spend watching TV/DVDs and engaging in active behaviours in daily diaries at baseline and 6 months

Observational measures:
Child food intake when at preschool (2 week days) is recorded using a food checklist at baseline and 6 months

Completion date
16/07/2012

Eligibility

Key inclusion criteria
Families with a preschool child (3-5 years) who attend a local government preschool centre

Participant type(s)
Other

Healthy volunteers allowed
No

Age group
Mixed

Sex
All

Key exclusion criteria
Does not meet inclusion criteria

Date of first enrolment
11/10/2011

Date of final enrolment
25/11/2011

Locations

Countries of recruitment
United Kingdom

England

Study participating centre
Falla Park Primary School
Falla Park Road
Felling
Gateshead
United Kingdom
NE10 9HP

Study participating centre
Corpus Christi Primary School
Dunsmuir Grove
Gateshead
United Kingdom
NE8 4QL

Study participating centre
Brighton Avenue Primary School
Brighton Road
Gateshead
United Kingdom
NE8 1XS

Study participating centre
Bridgewater Community Primary School
Bridgewater
Delaval Road
Benwell
Newcastle upon Tyne
United Kingdom
NE15 6NL

Sponsor information

Organisation
Newcastle University

ROR
https://ror.org/01kj2bm70

Funder(s)

Funder type
Research organisation

Funder Name
Fuse, the Centre for Translational Research in Public Health

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 lorraine.mcsweeney@ncl.ac.uk

IPD sharing plan summary

Available on request

Study outputs

Output type	Details	Date created	Date added	Peer reviewed?	Patient-facing?
Results article	results	11/03/2017		Yes	No