Structured lifestyle education for people with schizophrenia

| Submission date | Recruitment status No longer recruiting | [X] Prospectively registered | | |
|-------------------|--|------------------------------|--|--|
| 20/03/2014 | | [X] Protocol | | |
| Registration date | Overall study status | Statistical analysis plan | | |
| 20/03/2014 | Completed | [X] Results | | |
| Last Edited | Condition category | Individual participant data | | |
| 15/11/2019 | Mental and Behavioural Disorders | | | |

Plain English summary of protocol

Background and study aims

There is an urgent need to develop ways to help people with schizophrenia and other severe mental illnesses (SMI) to manage their weight. Obesity and overweight occur 23 times more commonly among people with schizophrenia. As well as increasing the risk of physical health problems such as diabetes and heart disease, weight gain may be a reason that stops people from taking their medication. This can make their mental health worse. There is evidence to suggest that people with schizophrenia can change their diet and exercise habits, with appropriate support, in the short term. Research is needed to see whether lifestyle interventions are effective in promoting further weight loss in the longer term for people with SMIs. This aim of this study is to develop a lifestyle education programme that meets the needs of people with SMI and first episode psychosis. We will adapt the programme from a successful education programme called DESMOND, which was developed for people with diabetes or at risk of diabetes.

Who can participate?

We aim to recruit around 400 people with schizophrenia (including first episode psychosis) from 10 Mental Health Trusts in the UK.

What does the study involve?

In the first part of the study trained educators will deliver a test programme to patients in three cycles. Feedback from each cycle will be used to improve the programme. In the second part of the study participants will be randomly allocated to one of two groups. One group will continue to receive their usual health and social care. The other group will receive their usual health and social care and also the programme developed during the first part of the study. This is likely to be delivered over several weekly sessions followed by 'booster' sessions every 3 months. It is important to find out if people with schizophrenia can change their lifestyle and lose weight as a result of the education programme. We will measure body weight during the trial and measure other potential health benefits from changes in diet and physical activity. We will also see whether the programme is acceptable to people with SMI, their carers and health care professionals.

What are the possible benefits and risks of participating?

Previous research studies suggest that lifestyle education programmes can lead to reductions in body weight and diabetes. People often feel better as a result of the increase in exercise and healthier diet. The study is unlikely to cause harm but it is possible that participants may injure themselves through doing physical activity they are not used to. Although no adverse effects are anticipated, the education programme may not help people to lose weight or prevent weight gain.

Where is the study run from?

This study is sponsored by Sheffield Health and Social Care NHS Foundation Trust and managed by Sheffield Clinical Trials Research Unit (CTRU), The University of Sheffield.

When is the study starting and how long is it expected to run for? Recruitment is due to start in December 2014 and will run until March 2016. All participants can expect to be involved in the study for about 12 months. Follow-up is expected to finish in March 2017.

Who is funding the study? NIHR Health Technology Assessment Programme - HTA (UK)

Who is the main contact? Rebecca Gossage-Worrall r.gossage-worrall@sheffield.ac.uk

Contact information

Type(s)

Scientific

Contact name

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Additional identifiers

Protocol serial number HTA 12/28/05; 16040

Study information

Scientific Title

STEPWISE: a multi-centre randomised controlled trial assessing STructured lifestyle Education for People WIth SchizophrEnia (including first episode psychosis) to reduce weight gain of patients prescribed antipsychotic medication

Acronym

STEPWISE

Study objectives

There are two stages involved in STEPWISE:

- 1. The intervention development study (IDS) will adapt the NICE approved education programme DESMOND™, to meet the needs of people with schizophrenia.
- 2. A multicentre open-labelled individually randomised (parallel group) controlled trial of a group lifestyle education programme in people with schizophrenia including those with first episode psychosis.

The primary objective of the trial is to evaluate the effectiveness of structured lifestyle education on reduction of weight gain for people with schizophrenia and first episode psychosis.

More details can be found at: http://www.nets.nihr.ac.uk/projects/hta/122805 Protocol can be found at: http://www.nets.nihr.ac.uk/__data/assets/pdf_file/0019/115561/PRO-12-28-05.pdf

Ethics approval required

Old ethics approval format

Ethics approval(s)

NRES Yorkshire and the Humber - South Yorkshire, 04/02/2014, ref: 14/YH/0019

Study design

Randomised; Interventional; Design type: Treatment

Primary study design

Interventional

Study type(s)

Treatment

Health condition(s) or problem(s) studied

Topic: Mental Health Research Network; Subtopic: Schizophrenia; Disease: Schizophrenia

Interventions

NICE recommended usual care: An annual physical health review as per the NICE guidelines. Verbal & printed advice on the risk of weight gain & lifestyle advice, including information about diet, exercise, smoking & alcohol use.

Structured lifestyle education: An adapted DESMOND programme delivered to a group of approximately 6-8 people in 4 weekly sessions lasting 1.5 hours, by two trained facilitators, with

modules (such as, the patient story, physical activity, and diet) designed to target perceptions and knowledge of risk status and chronic disease, self-efficacy and response-efficacy beliefs around health behaviour. Support contract and booster sessions provided by facilitators.

Follow Up Length: 12 month(s)

Study Entry: Single Randomisation only

Intervention Type

Behavioural

Primary outcome(s)

Weight (kg) at 12 months after randomisation; Timepoint(s): 12 months

Key secondary outcome(s))

- 1. Adapted Brief Illness Perception Questionnaire; Timepoint(s): 3 and 12 months
- 2. Adapted Dietary Instrument for Nutrition Education; Timepoint(s): 3 and 12 months
- 3. Adverse events; Timepoint(s): 3 and 12 months
- 4. Blood pressure; Timepoint(s): 3 and 12 months
- 5. Body Mass Index; Timepoint(s): 3 and 12 months
- 6. Brief Psychiatric Rating Scale; Timepoint(s): 3 and 12 months
- 7. Changes in medication; Timepoint(s): 3 and 12 months
- 8. Client Service Receipt Inventory; Timepoint(s): 3 and 12 months
- 9. EQ-5D 5L; Timepoint(s): 3 and 12 months
- 10. Fasting glucose, lipid profile and glycated haemoglobin (HbA1c); Timepoint(s): 12 months
- 11. Patient Health Questionnaire 9 (PHQ-9); Timepoint(s): 3 and 12 months
- 12. RAND SF36; Timepoint(s): 3 and 12 months
- 13. Smoking status; Timepoint(s): 3 and 12 months
- 14. Waist circumference; Timepoint(s): 3 and 12 months
- 15. Weight; the proportion who maintained or reduced weight; percentage change in weight; Timepoint(s): 3 and 12 months
- 16. Wrist worn accelerometry (7-day GeneActiv); Timepoint(s): 3 and 12 months

Completion date

06/04/2017

Eligibility

Key inclusion criteria

- 1. Age \geq 18 years old. There is no upper age limit.
- 2. Clinical diagnosis of schizophrenia (defined by Internal Classification of Diseases (ICD-10) codes F20 Schizophrenia and F25 Schizoaffective disorders)) including first episode psychosis using case note review. There is no limit on the duration of illness
- 3. Patients must have been treated with an antipsychotic. For those with established schizophrenia, the treatment duration should be at least 1 month prior to the start of the trial.
- 4. Ability to give written informed consent
- 5. Ability and willingness to attend and participate in a group education programme
- 6. Ability to speak and read English
- 7. Body mass index 25 kg/m2 or concerned about weight gain since treatment initiation. For patients from South Asian and other Black and Minority Ethnic backgrounds, the BMI threshold will be reduced to 23 kg/m2.

Participant type(s)

Patient

Healthy volunteers allowed

No

Age group

Adult

Lower age limit

18 years

Sex

All

Key exclusion criteria

- 1. Physical illnesses that could seriously reduce their life expectancy or ability to participate in the trial
- 2. A co-existing physical health problem that would, in the opinion of the medical investigators, independently impact on metabolic measures.
- 3. Mental illnesses that could seriously reduce their ability to participant in the trial
- 4. Current pregnancy, plus mothers less than 6 months post-partum. Conditions associated with significant weight gain e.g. Cushing's syndrome
- 5. Significant alcohol or substance misuse
- 6. A diagnosis or tentative diagnosis of psychotic depression or mania
- 7. A primary diagnosis of learning disability
- 8. Already engaged in a systematic weight management programme.

Date of first enrolment

01/12/2014

Date of final enrolment

01/03/2016

Locations

Countries of recruitment

United Kingdom

England

Study participating centre

Health Services Research, School of Health & related Research (ScHARR)

Sheffield United Kingdom S1 4DA

Sponsor information

Organisation

Sheffield Health and Social Care NHS Foundation Trust (UK)

ROR

https://ror.org/05cn4v910

Funder(s)

Funder type

Government

Funder Name

Health Technology Assessment Programme

Alternative Name(s)

NIHR Health Technology Assessment Programme, Health Technology Assessment (HTA), HTA

Funding Body Type

Government organisation

Funding Body Subtype

National government

Location

United Kingdom

Results and Publications

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 results | Date created Date added Peer reviewed? Patient-facing? | | | |
|-----------------|---------------------------|--|-----|----|--|
| Results article | | 01/11/2018 | Yes | No | |
| Results article | results | 01/02/2019 | Yes | No | |
| | protocol | | | | |

| Protocol article | 29/09/2016 | | Yes | No | |
|-------------------------------|-------------------------------|------------|------------|-----|-----|
| HRA research summary | | 28/06/2023 | No | No | |
| Other publications | process evaluation | 13/11/2019 | 15/11/2019 | Yes | No |
| Participant information sheet | Participant information sheet | 11/11/2025 | 11/11/2025 | No | Yes |
| Study website | Study website | 11/11/2025 | 11/11/2025 | No | Yes |