

Feasibility study of a psychosocial diabetes education programme for young people with type 1 diabetes: a protocol



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Background and aim



Background:

- Adolescence is a challenging time for people with type 1 diabetes, associated with worsening glycaemia and disengagement with care.
- Educational interventions often focus on imparting diabetes-specific skills rather than attending to the broader psychosocial challenges young people commonly experience.
- To address this, we codesigned a psychosocially modelled programme of diabetes education, named 'Youth Empowerment Skills' (YES), with young people with T1DM.



Aim:

To test the feasibility (acceptability, implementability, recruitment and completion) of the YES programme, and estimate its efficacy in relation to metabolic (glycaeted haemoglobin), healthcare (emergency and hypoglycaemic events) and psychosocial (diabetes self-management, confidence in managing healthcare, illness perception and quality of life) outcomes.

The YES intervention

Development

The YES programme is a novel psychoeducational intervention, which was developed through codesign with young people with type 1 diabetes.



Theory

The programme uses three psychological theories: social learning theory, self-regulatory theory (personal identity) and dual-process theory



Learning techniques

Experiential and group-based learning



Immersive simulations with scenarios



Learning together through activities



Content

Diabetes as a part of daily life.



The psychological impact of diabetes.



Staying safe while being away from home (parties/ alcohol/drugs and diabetes).



Immersive simulations (hypoglycaemia, DKA, impaired physical function).



Reverse role-playing of health consultations (how to get more out of a consultation).



Relationships (peers/partners/family).



Attitudes towards food, weight and eating out.



Getting to know your body (foot-care/eye screening/ sexual health).



Exercise and diabetes (activity-based sessions, eg, rock climbing).



How to prevent diabetes emergencies.



Method

Design: feasibility randomised controlled trial (waiting-list design) with integrated process evaluation

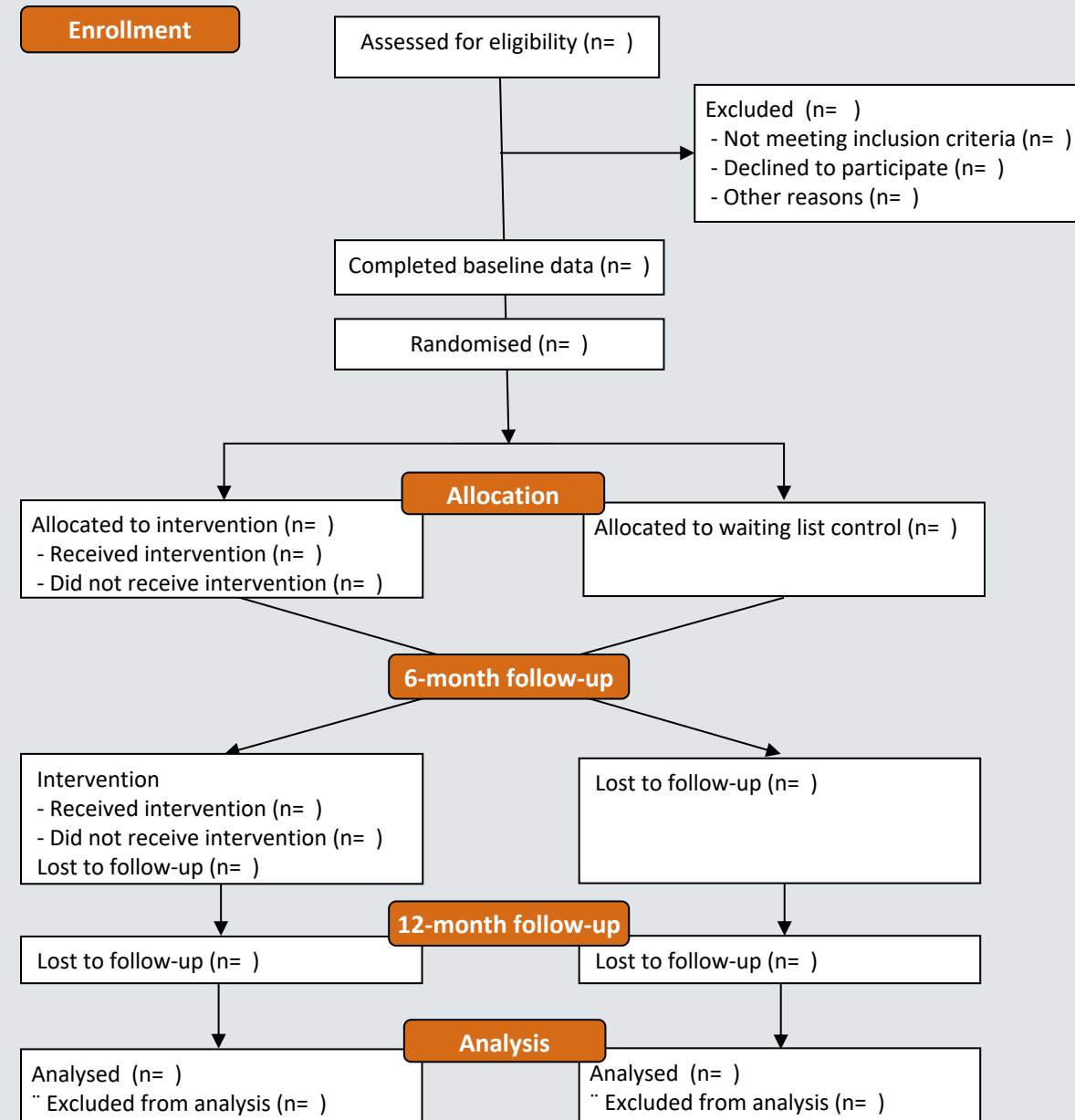
Setting: diabetes centres in London, UK

Participants: 50 young people (14-19 years) with type 1 diabetes

Outcomes: ► HbA1c, blood glucose monitoring, insulin adherence, emergency care events, hypoglycaemia and severe hypoglycaemic events, weight - collected through clinical records

► diabetes self-management, confidence in diabetes self-care, diabetes quality of life, illness perception - measured through validated scales

► feasibility, acceptability and appropriateness - measured through semi-structured interviews and validated scales





Results and conclusion

- **Results:** The study findings will be used together with a review event to optimise intervention components, outcome measures and recruitment methods to inform a subsequent definitive trial.
- **Conclusion:** There is a need to develop and test new approaches for young people with type 1 diabetes that support them with the significant psychological and social challenges they experience.
- This study will help establish trial feasibility, indications of clinical effectiveness and implementation success factors of a co-designed psychosocially modelled intervention for young people with type 1 diabetes.