

Proposal for DfE scholarship for the academic year 2019/2020

Supervisors: Prof David R Thompson and Dr Chantal F Ski

Title: A family-based e-health programme to reduce cardiovascular disease risk.

Background: Many cardiovascular disease (CVD) modifiable risk factors can be addressed through dietary or lifestyle change. Obesity is one such factor. In Northern Ireland (NI) one-quarter of adults are considered obese (more than one-third are overweight) and one-quarter of children are overweight or obese. Overweight or obese children are at increased risk of obesity, and consequently CVD, in adulthood. Targeting high-risk parents, and consequently high-risk children, in an intervention that reduces their risk of developing CVD is a sensible primary preventative measure. e-health programmes appear successful in promoting positive behavioural and lifestyle change but their effect on CVD risk in families is unknown.

Aim: To develop and evaluate a family-based e-health programme to reduce CVD risk.

Objectives:

1. To develop an e-health programme to reduce risk in families who are overweight or obese
2. To undertake a feasibility study in a sample of family members
3. To conduct a randomised controlled trial (RCT) to evaluate the effectiveness of the programme in reducing CVD risk

Target group: Parents and their children who are overweight or obese.

Intervention: An e-health programme involving online interactive sessions, psycho-education resources and physical activities designed to reduce CVD risk.

Setting: In the home using computer/laptop/tablet.

Methods: A mixed methods design. Stage 1: develop an e-health programme that adheres to current CVD guidelines evidence. Stage 2: conduct a feasibility study of the programme. Stage 3: an RCT to assess programme effectiveness.

Expected outcome: Production of an e-health programme that can be used by families to reduce their risk of CVD.