

COLLABORATION FOR LEADERSHIP IN APPLIED HEALTH RESEARCH AND CARE SOUTH WEST PENINSULA (PENCLAHRC)

Case Studies Showcasing the Value of CLAHRC Funding 1 January 2014 to 31 March 2015

5. The Healthy Lifestyles Programme (HeLP) - The Impact of a successful study design and intervention

Background

Despite the dramatic rise in childhood obesity and research in this area, there is a paucity of effective interventions which support children to sustain healthy behaviours. Although there is no evidence of a 'school effect' on childhood obesity¹ schools remain an obvious location for obesity prevention interventions. However, less attention has been given to ensuring that school-based interventions are feasible and acceptable to schools and can engage children and parents/ carers. We have taken a co-creational approach to developing a novel obesity prevention programme which uses drama based techniques to motivate and support children in making healthy behaviours, the Healthy Lifestyles Programme.

Origin of the research question

The original research question regarding preventing childhood obesity came from our local Public Health Authority who were concerned about the rise in prevalence of childhood overweight and obesity and the lack of evidence for effective prevention programmes.

Our research approach

From the outset we built relationships with teachers, head teachers, children and their parents/ carers to understand what types of activities would engage and enthuse children and their families as well as be deliverable within the school timetable. We also wanted to co-create the research refining and evaluating the resulting programme.

What HeLP is

The Healthy Lifestyles Programme targets Year 5 children (with some components also being delivered to the whole school) and runs over three school terms (spring and summer term of year 5 and autumn term of year 6). The aim is to deliver a general healthy lifestyle message encouraging a healthy energy balance with a focus on changing three specific behaviours relating to energy intake and expenditure; decreasing the consumption of sweetened fizzy drinks; increasing the ratio of healthy to unhealthy snacks consumed, and reducing screen-based activities. We also use the '80/20' mnemonic, which suggests we should be active and eat healthily 80% of the time. There are four phases of HeLP; creating a receptive context, an intensive week of drama-based activities, goal setting and reinforcement. Each phase of HeLP is designed to involve parents as much as possible. The intervention has also been designed to enthuse the staff to adopt

the messages and continue with related activities during or after the intervention. Our hypothesis is that school engagement will strengthen child and thus parental engagement with the programme.

Refining the intervention

Listening to teachers, parents and children we refined the intervention, adding in an additional phase of reinforcement activities, bringing in dance groups as well as local sports groups and ensuring all the teaching materials met National Curriculum guidelines and the programme as a whole complemented the Healthy Schools award and PHSE lessons for that age group.

Teachers and parents as ambassador

Our ethos of co-creating the research led to teachers (and headteachers) and parents acting as ambassadors for the Programme. Following the initial pilot the headteacher rang other primary heads to secure a second school for programme refinement and development of measurement activities. The head teacher and a Year 5 teacher from that school subsequently spoke at the Devon Association of Primary Heads to help us recruit schools for the exploratory trial. Parents and children came forward and offered to help us design the trial to determine the effectiveness of HeLP, including what an acceptable trial design would look like, writing the parent information sheets, reviewing questionnaires, maximising parental engagement opportunities in the programme.

CONTRIBUTION OF NIHR CLAHRC

This project developed from a question submitted by partner organisations during the pilot NIHR CLAHRC. The development and evaluation of the intervention has been led by Professors Wyatt and Logan who are supported by PenCLAHRC which also provided methodological and PPI input. The process used has followed the PenCLAHRC principles of involving those who will use the information, including families, teachers, partner organisations and public health and education, in all stages to enhance the likelihood of the results changing practice.

WHAT HAPPENED NEXT?

How this co-creational approach has worked

School Recruitment

We had 3 months to recruit 32 schools (half of which had to have >19% pupils eligible for free school meals and at least one year 5 class with 20 or more pupils (only 40 primary schools in Devon met this criteria). A head teacher and teacher supported our recruitment, attending locality meetings of the Devon Association of Primary Heads and discussing the study and what it was like to participate. Within three months we had 36 schools wanting to participate and of these four agreed to be on a waiting list should any school drop out before Cohort 2 started.

Children Recruitment

We had several parents who were part of the Advisory panel for the trial and they read and commented on the literature regarding the trial which was sent to 1371 families of Year 5 children. Only 21 children opted out of the study, leaving 1350 children participating in the trial.

Retention

Schools: All schools in Cohort 1 remained in the study. Two schools went into special measures before cohort 2 started and requested to leave the trial, however two schools from the waiting list still wanted to participate; all schools have remained in the study in Cohort 2 too. Baseline measures were height, weight, % body fat; waist circumference; physical activity and dietary behaviours. Because we have involved teachers and families in designing the study (as well as the programme) very few children chose not to participate in the study and 99.5% of all the children provided height, weight, diet and activity data at baseline. We have 18 month follow up data on 95% of the children and 94% for Cohort 1, which makes this one of the most successful school-based trials to date in terms of recruitment and retention. As a result of these retention rates, NIHR awarded us £85,000 additional funding to ensure we would capture all the data from the children.

Engagement with the Programme

651 children have received the healthy lifestyles programme and unlike other school based obesity prevention programmes, there is no differential loss to follow up or engagement with Programme from children from less affluent backgrounds. This suggests that the Programme engages all children and their families regardless of socioeconomic status. Involving people at all stages in the research has ensured that we have a Programme that schools and children want to participate in, engages teachers and families, and is allowing us to deliver a trial to the highest possible standard.

Impact of how research is being conducted

We have been invited to speak at an NIHR schools-based research event to discuss the challenges and facilitators to conducting school based research (October 2014). We have been invited to speak at a regional Public Health event looking at commissioning for preventative measures for childhood obesity (February 2015). We have discussed our evaluative approaches at a SfPH evaluation day for local government employees. KW has been approached by Eden to be an ambassador for a joint Wellcome-Eden national food programme. The HeLP trial is a case study of conducting publicly engaged research for the RCUK funded Exeter Catalyst

The development and evaluative research underpinning HeLP is underpinning a new piece of research looking at healthy lifestyles for obese young people- this is being submitted to NIHR-RfPB and / or MRC/ PHR.

Impact of trial to date

We have been approached by a social enterprise company who are looking for health promoting, school based programmes and would like to be involved in the roll out of HeLP should it be effective. Initial conversations with Public Health England suggest that if HeLP is effective a social enterprise would be a recommended delivery mode. Manuals for delivery (teachers, actors and HeLP coordinators) have been developed and copyrighted.

An unintended consequence of the programme has been the identification (by teachers, parents and children) of possible obsessive eating/ activity behaviours. At present there is no formal mechanism within schools to identify such behaviours and our local public health directorate and community paediatricians and head teachers are interested in how we can capitalise on this.

One of the 'holy grails' of intervention is to develop a programme which people want to engage with and participate in and has mitigated against the possibility of intervention drift. If HeLP is effective and cost effective then we have an obesity prevention programme which engages schools, families and children across the social spectrum, is adaptive to the local school environment and has the necessary relationships with local public health delivery teams, sports and dance and theatre groups, local education authority for immediate regional roll out. Relationships and processes are also being forged for potential national roll out.