

Child Obesity 2018: An UK based digital intervention to enable parents to keep abreast of their children's growth and to support reductions in childhood obesity – A mixed methods study-Rinita Dam- Birmingham City University, UK

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To understand the health risk of the local population and to combat rising levels of childhood obesity, Manchester University NHS Foundation Trust has developed the Children's Health and Monitoring Programme (CHAMP). CHAMP includes: (a) annual weighing and measuring for primary school children (age 4 to 11), and (b) a feedback system to convey Body Mass Index (BMI) results to parents via a secure website. Objective: To investigate how effectively CHAMP engaged with parents and supported reductions in childhood obesity. Methods: A mixed-methods design was used. Anonymised CHAMP registration and BMI data were collected between September 2013 and March 2017. BMI change over time was compared in matched cohorts of children whose parents had and had not registered with the CHAMP website. Qualitative focus groups and interviews were used to explore perspectives among 29 key informants (parents and staff) from six schools in Manchester. Results: Overweight children whose parents had not registered with the CHAMP website gained a median of 0.14 BMI centiles between measurements, whilst children of CHAMP-registered parents decreased their BMIs by a median of 0.4 UK90 centiles per year ($P=0.02$). Qualitative analysis revealed a minority of parents had made lifestyle changes within their families to improve their health directly in response to the feedback received from the CHAMP website. Thematic analysis yielded further subthemes concerning psychological impacts of CHAMP on families. Conclusion: CHAMP, which is unique as both a monitoring system and community based intervention, supports parents in making positive lifestyle choices which may benefit their child's growth trajectory. Methods and analysis A randomised waitlist-control trial will assess a 10-week interactive, family-based lifestyle intervention followed by four maintenance sessions, in BC, Canada. We aim to enrol 186 families. The blended intervention includes at least 26 contact hours between participants and programme providers, including interactive activities and educational materials through weekly 90-min group sessions, an online family portal, and self-directed family

activities. Curricular content includes information and activities related to healthy eating, physical activity (PA), positive mental health, parenting practices and sleep hygiene. The waitlist control group will receive a modified programme with the same 10-week sessions in the family portal, and four group sessions. Family-based behavioural weight management interventions are efficacious and widely used to address childhood obesity. Curriculum and strategies vary extensively and scale-up often depends on ensuring that the intervention fits Families participate in data collection at baseline, postintervention (week 10) and follow-up (week 18). The primary outcome is to assess changes in child body mass index z-score at 10 weeks between the groups. Secondary outcomes include changes at 10 weeks between the groups in child and parent PA behaviour and skills, healthy eating behaviour, and mental health. Process evaluation will address reach, implementation and maintenance (baseline, 10-week and 18-week) using recruitment tracking forms, parent questionnaire, programme attendance tracking forms, leader feedback surveys, parents and children satisfaction surveys and postprogramme interviews with facilitators, stakeholders and parents. Intention-to-treat analyses will be conducted. Process evaluation will be analysed thematically. Children and adolescents with overweight and obesity are a global health concern. This is an integrative overview of six Cochrane systematic reviews, providing an up-to-date synthesis of the evidence examining interventions for the treatment of children and adolescents with overweight or obesity. The data extraction and quality assessments for each review were conducted by one author and checked by a second. The six high quality reviews provide evidence on the effectiveness of behaviour changing interventions conducted in children <6 years (7 trials), 6–11 years (70 trials), adolescents 12–17 years (44 trials) and interventions that target only parents of children aged 5–11 years (20 trials); in addition to interventions examining surgery (1 trial) and drugs (21 trials).