

Available online at www.sciencedirect.com

Public Health

journal homepage: www.elsevier.com/puhe

Original Research

The adaptation and translation of the PEACH™ RCT intervention: the process and outcomes of the PEACH™ in the community trial

R.A. Perry ^{a,*}, R.K. Golley ^b, J. Hartley ^a, A.M. Magarey ^a^a Nutrition and Dietetics, School of Health Sciences, Flinders University, Adelaide, South Australia, Australia^b Sansom Institute for Health Research, School of Pharmacy and Medical Sciences, University of South Australia, Adelaide, South Australia, Australia

ARTICLE INFO

Article history:

Received 3 April 2017

Received in revised form

18 July 2017

Accepted 21 August 2017

Available online 26 October 2017

Keywords:

Children

Weight management

Translation

RCT

Community

ABSTRACT

Objective: To describe the process and report selected outcomes of translating an effective child weight management initiative (PEACH™) from a randomised controlled trial intervention to a community health programme.

Study design and methods: Pre-post study design utilising the reach, effectiveness, adoption, implementation and maintenance (RE-AIM) evaluation framework. Adaptation of PEACH™ required significant promotional activity and consideration of legal, ethical and financial issues. PEACH™ components were revised and an evaluation design based on the RE-AIM framework was developed. Facilitator training workshops were made available to South Australian health or education professionals initially, then opened up to new graduates, interstate dietitians and others interested in professional development. Facilitators completed pretraining and post-training questionnaires and a third questionnaire following programme delivery. Data were collected from families by facilitators and returned to university staff for assessment of change (baseline to programme end) in body mass index (BMI) and waist circumference (WC) z-scores.

Results: Changes to organisational and political environments prevented maximum programme reach and adoption. Nonetheless, data indicated that PEACH™ was effective at improving facilitators' confidence ($P < 0.05$) and children's ($n = 37$) BMI z-score (-0.17 , 95% confidence interval [CI]: $0.03:0.30$, $P = 0.016$), WC z-score (-0.14 , 95% CI: $-0.02:0.30$, $P = 0.09$) and lifestyle behaviours. Collection of maintenance data was prevented due to time and financial constraints.

Conclusions: Translational research needs to develop ways to effectively and efficiently bridge the gap between behavioural research and practice to improve the adoption of

Abbreviations: BMI, body mass index; BMIz, BMI z-score; CHP, community health programme; CPG, clinical practice guidelines; PEACH™, Parenting Eating and Activity for Child Health; PEACH™ IC, PEACH™ in the Community; RCT, randomised controlled trial; WC, waist circumference; WCz, waist circumference z-score.

* Corresponding author. Nutrition and Dietetics, School of Health Sciences, Flinders University South Australia, GPO Box 2100, Adelaide, South Australia 5000, Australia. Tel.: +61 8 8201 7739.

E-mail address: r.perry@flinders.edu.au (R.A. Perry).

<http://dx.doi.org/10.1016/j.puhe.2017.08.009>

0033-3506/© 2017 The Royal Society for Public Health. Published by Elsevier Ltd. All rights reserved.

evidence-based approaches to child weight management. Nutrition educators and researchers can drive these nutrition-focussed translational research efforts forward. Funding bodies and health service organisations are encouraged to provide financial and structural support for such activity.

© 2017 The Royal Society for Public Health. Published by Elsevier Ltd. All rights reserved.

Introduction

Childhood obesity continues to be a major global public health issue¹ which requires the early application of evidence-based practice to its prevention and management. Such evidence exists in the form of a Cochrane Review² and various national practice guidelines^{3,4} which recognise the cornerstones of management to be diet and activity changes through behaviour modification with parental involvement and support.

One of the several child weight management studies showing promising results is the Parenting, Eating and Activity for Child Health Programme (PEACH™). In 2004, the Australian National Health and Medical Research Council (NHMRC) funded a single blinded randomised controlled trial (RCT) to test the effectiveness of incorporating parenting skills training in the management of overweight in 5- to 9-year olds (ACTR: 00001104).⁵ The trial demonstrated a 10% reduction in relative adiposity (child body mass index z-score [BMIz] and waist circumference z-score [WCz]) at intervention end (6 months), which was maintained in the following 18 months without further programme contact.⁵ While the initial change in adiposity is similar to that reported in other child weight management trials,^{2,6} the long-term maintenance is better than published adult outcomes.^{3,7} Furthermore children's eating and activity behaviours improved,⁸ indicating that the programme led to enhanced lifestyle behaviours contributing to healthy growth.

These anthropometric and behavioural outcomes, combined with the positive participant feedback, limited availability of evidence-based child weight management services⁹ and reported low levels of practitioner confidence to practice in this area,¹⁰ provided the impetus to disseminate PEACH™ and provide a practical model for its transition from efficacy-to-effectiveness.¹¹

Dissemination, or translational research, describes a continuum which integrates basic, patient-oriented and population-based research, with the aim of improving public health.^{12,13} In the behavioural sciences, translational research focusses on the delivery of recommendations, new treatments and research knowledge to individuals or groups within communities.¹⁴ There are few reports of dissemination, or translation, of health behaviour interventions^{2,11} such as PEACH™. This paper therefore aims to report the process and selected outcomes of translating an effective child weight management initiative (PEACH™) from an RCT to a community health programme (CHP).

Methods

Preliminary work

Support for the adaptation of the PEACH™ RCT intervention into a CHP required significant promotional work, including dissemination of the RCT findings at conferences (local/international), in peer-reviewed journals, government departmental briefings and via the media. Relationships were developed with government departments, clinicians and managers within service provider organisations. As a result, funding for translation to a CHP was secured from a state government health department (\$200,000 over 3 years) and a car manufacturing company (\$85,000). In-house legal discussions were held regarding licencing, intellectual property and maintaining programme integrity. Ethical approvals were obtained from four committees (see [Author statements](#) section for details).

In 2008, adaption of the PEACH™ RCT intervention (conducted in the hospital out-patient setting) into a non-research setting CHP, titled 'PEACH™ in the Community' (PEACH™ IC) commenced. The revision and evolution of programme components are detailed below.

Revision of programme eligibility criteria

The PEACH™ RCT upper BMIz cut-off eligibility criteria of >4.0 was removed following observations from the analysis of the RCT data that BMIz above this point was unlikely to be associated with secondary health conditions. The age range criterion was expanded from 5–9 years of age to 4–10 years which enabled the recruitment of children through a newly introduced statewide 4-year-old health check-up, to the upper middle primary school years (when children are aged 10 years). Eligible siblings could enrol regardless of their weight status.

Programme content and supporting resources

Modifications to the PEACH™ RCT intervention were informed by feedback from RCT participants ([Table 1](#)). A key modification was to weave parenting skills relevant to promoting healthy lifestyle behaviours through the healthy lifestyle sessions, rather than deliver the generic parenting programme as an initial stand-alone component. For example, the generic parenting programme included in the RCT had a

Download English Version:

<https://daneshyari.com/en/article/7525910>

Download Persian Version:

<https://daneshyari.com/article/7525910>

[Daneshyari.com](https://daneshyari.com)