

COMmunicating Healthy Beginnings IN Existing Services (COMBINE) Study

Translating an evidence-based obesity prevention program into existing home-visiting services

Sarah Taki*, Li Ming Wen, Chris Rissel, Louise Baur

NHMRC Centre of Research Excellence in the Early Prevention of Obesity in Childhood
School of Public Health, University of Sydney
The Children's Hospital at Westmead Clinical School, University of Sydney

May 2018



Lessons learned:

What is needed for sustaining intervention effects

- To develop long-term viable and sustainable interventions
- To build interventions into existing health services
- To find low cost and cost effective interventions



COMmunicating Healthy Beginnings IN Existing Services (COMBINE)

AIMS:

- To integrate the Healthy Beginnings (HB) program with existing home-visiting services and into the real-world setting.
- To explore the barriers and enablers of implementing the Healthy Beginnings program as part of the sustained health home-visiting (SHHV) program in Sydney Local Health District.



Healthy Beginnings Trial

- Staged home-based early obesity intervention trial delivered by community nurses to primiparous mothers from 3rd trimester to children aged 24 months.
- Provided 8 home visits - once before the birth, and at 1, 3, 5, 9, 12, 15, 24 months by a trained nurse – plus usual care.

Key intervention messages:

- Breast is best

- No solids for me until 6 months

- Only water in my cup

- I am part of an active family

- TV away – let's go play

- I eat a variety of fruit and vegetable every day



- Although expensive and not sustainable in the longer term, the intervention effectively improved infant feeding practices and child body mass index (BMI) at 2 years.

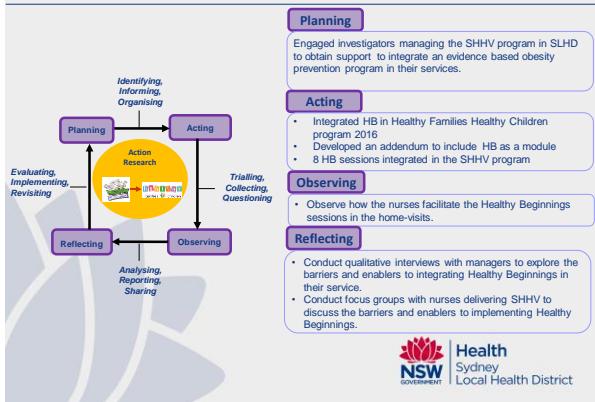


Healthy Beginnings Translational Research

Translating research evidence from the **Healthy Beginnings Trial** to prevent childhood obesity at the beginning of life: **feasibility, effectiveness and cost-effectiveness**



Methods



Action Research: Acting

B Program Schedule						
HFNC	PHR Checks	ASQ-3	ASQ-SE	Learning to Communicate	Healthy Beginnings	Satisfaction (PSQ) & Achievement (PEI)
Antenatal visit 1					30-36 weeks	
Antenatal visit 2						
Antenatal visit 3						
BIRTH	New baby visit					0-6 weeks
3						
4					1 min	
5						
6	6-8 weeks	2 mths		Session 1	6 weeks	8-12 weeks
8				Session 2		
10				Session 3	3 mths	
12				Session 4		
15				Session 5		
16		4 mths				
19				Session 6	5 mths	
22				Session 7		
25	6 mths	6 mths	8 mths	Session 8		10-12 mths
33				Session 9		
38				Session 10	9 mths	
40						
45		9 mths		Session 11	12 mths	12-18 mths
52	12 mths	12 mths	12 mths	Session 12		18-24 mths
53						
70					18 mths visit content	
78		18 mths				
87						
96					24 mths visit content	
104		2 yr check*	24 mths	24 mths		24 mths

Action Research: Acting



Action Research: Reflecting

The Consolidated Framework for Implementation Research (CFIR)

CFIR	Question topics
Intervention characteristics	<ul style="list-style-type: none"> Knowledge about the evidence on the effectiveness of the HB program Most influential stakeholders that need to be engaged to integrate the HB program across NSW Changes or alterations to the HVS that needed to happen to effectively integrate and implement the HB program?
Outer setting	<ul style="list-style-type: none"> Local, state, or national performance measures, policies, regulations, or guidelines which influenced the decision to implement the HB program
Inner setting	<ul style="list-style-type: none"> Compatibility of the HB program with the existing work processes and practice in the home-visits Priority of delivering HB relative to other initiatives delivered in the home visits Required support needed for the nurses to deliver the HB program Positives/negatives of delivering the HB program
Process	<ul style="list-style-type: none"> Expectation on how to measure the effectiveness of the integration of the HB program Knowledge on how the HB program was integrated into the home-visiting services Perception of the quality of the supporting materials and bundling of the HB program for implementation

Action Research: Reflecting

Qualitative studies:

- 9 qualitative interviews were conducted with the management team involved in the sustained home-visiting service (SLHD):
 - Chief Executive (n=1)
 - General Manager (n=1)
 - Director (n=1)
 - Nurse Manager (n=1)
 - Nurse Unit Managers (n=4)
 - Clinical Nurse Consultant (n=1)
- 2 focus groups conducted with Child and Family Health Nurses who are delivering HB as a module in the sustained home-visiting service
 - Canterbury (n=5)
 - Camperdown (n=3)



Preliminary findings

Theme	Barriers	Enablers	Quote
Intervention characteristics: Evidence Strength & Quality			
Awareness of the evidence from the HB trial	Lack of dissemination to staff who were not involved in the research	Belief that the evidence from the previous HB trial should be implemented across various services	"I don't think a lot were. I was aware because basically I had a friend who went onto the trial." (barrier)
Inner setting: Relative priority			
Priority of delivering the HB program	The clients have a number of competing issues	Targeting obesity prevention is as important as the other initiatives that are part of the service	"The ones that they can take it in... it depends on the mental health status." (barrier)
Process: Reflecting and evaluating			
Support to implement the HB program	Felt there was a lack of support to deliver the HB program	The HB program checklist provided more structure to deliver support on healthy infant feeding behaviours	"I find the question the questions are good, and they're just a tool to prompt I guess a conversation that you're having with the parents." (facilitator)
Inner setting: Compatibility			
Compatibility of HB program with current practice	Implementing the HB program has not added to their practice	It is core business and has formalised practices	"To be honest, I find that I'm actually doing the same thing, but I'm ticking a box that I've done it." (barrier)



Recommendations

- The findings of this study identified that to successfully integrate the Healthy Beginnings program into existing services it is important to:
 - Acknowledge the current practices of the nurses regarding delivery of infant feeding support
 - Widely disseminate the evidence from the HB program to various clinicians to increase the motivation to implement the program
 - Develop a training package to deliver the HB program that would be part of the nurses training requirements (i.e. in-service, online course)
 - Highlight to the key stakeholders (managers and nurses) the advantages of integrating the services such as:
 - formalising current practices to deliver infant feeding practices at the specific milestones/age of the infant
 - contribution to achieve the districts Key Performance Indicators and targeting state priorities



Thank you and Acknowledgements

Members of the committee

Funding Sources:

NHMRC #393112, #1003780 #1028555, and #1101675

NSW TRGS 2016 round one #200

SLHD

Websites:

<http://www.healthybeginnings.net.au>

<http://www.earlychildhoodobesity.com/>

