

Children's Mercy Kansas City

SHARE @ Children's Mercy

Research Month 2021

Research at Children's Mercy Month

5-2021

A Family Obesity Intervention Combining Motivation Interviewing And Resource Mobilization

Helena Laroche

Amy M J O'Shea

Jessica Angino

Bery Engebretsen

Sarai Rice

See next page for additional authors

Follow this and additional works at: https://scholarlyexchange.childrensmercy.org/research_month2021

Authors

Helena Laroche, Amy M J O'Shea, Jessica Angino, Bery Engebretsen, Sarai Rice, Marvin Dejean, Kathy Janz, and Linda Snetselaar

A Family Obesity Intervention Combining Motivational Interviewing and Resource Mobilization

Helena H. Laroche MD, Amy MJ. O'Shea, PhD, Jessica Andino, MPH, Bery Engebretsen, MD, Sarai Rice, MDiv, Marvin L. Dejean, PhD, Kathy Janz, PhD, Linda Snetselaar, PhD

BACKGROUND: Obesity prevention is challenging especially for families with few resources.

METHODS:

Adult with BMI ≥ 30 and their child age 6-12

Recruitment focused on low-incomes families

Both groups:

- Community resource mobilization to assist with basic needs (heating, housing)
- Written education, newsletters

Health Coaching Group:

- Diet and physical activity specific resources
- Motivational interviewing - entire family

Outcomes 12 months

- Adult BMI
- Adult and Child Moderate-Vigorous Physical Activity and Sedentary Activity (accelerometer)
- Family Nutrition and Physical Activity Scale

Analysis: Intention to Treat. Multiple imputation, T-tests, generalized linear models with identity link

Connecting families with low incomes with community resources may have beneficial effects on obesity related behaviors but addition of health coaching did not improve outcomes

hhlaroche@cmh.edu

Funding: NIH NHLBI: R01HL119882

	Month 12 – Baseline Differences				p-value
	Control		Intervention		
	N	Mean (SE)	N	Mean (SE)	
Index Adult BMI (kg/m ²)	105	-0.1 (0.7)	103	0.3 (0.9)	0.67
Family Nutrition and Physical Activity Score	105	2.8* (1.0)	103	2.2* (0.9)	0.60
Index Adult Sedentary Activity, Min/24-Hr day	105	-16.1 (18.5)	103	-17.0 (24.3)	0.89
Index Child Sedentary Activity, Min/24-Hr day	105	32.5* (12.1)	103	39.9* (12.4)	0.74
Index Adults MVPA, Minutes/24-Hr day	105	0.5 (5.2)	103	-2.7 (9.0)	0.74
Index Child MVPA, Minutes/24-Hr day	105	-9.6* (3.3)	103	-7.0* (3.0)	0.58
Index Child BMI Z	105	0.0 (0.0)	103	0.0 (0.04)	0.87
Index Adult Sugar Sweetened Beverages	105	-1.3* (0.4)	103	-0.6* (0.4)	0.31
Index Child Sugar Sweetened Beverages	105	-0.7* (0.3)	103	-0.5* (0.2)	0.52
Adult Composite Measure (# criteria met)	73	1.7* (0.1)	71	1.6* (0.1)	0.69

* Significant change -12 mon

Reported receipt of basic resources showed a:

- Significant association with adult MVPA (+ 20 min/day, p=0.008)
- Clinically relevant associations with adult BMI (-1.2 kg/m², p=0.056) and fruit and vegetable servings (+0.36 serv, p=0.053).

DISCUSSION

- Both groups showed some improvements except in child activity
- Health coaching (HC) group was not better
- More research needed on the impact of resource connection on obesity prevention behaviors and how to improve connection
- Research needed to explore impact of HC after resource needs are met

