Children & Families
Commission of Orange County

Agenda Item No. 3
October 2, 2013 Meeting

DATE: September 23, 2013

TO: Children and Families Commission of Orange County

FROM: Christina Altmayer, Executive Director

SUBJECT: Final Report for Orange County Alliance for Community Health Research Grant

SUMMARY:

Since the Commission's inception, the knowledge that tobacco tax funds would be a declining revenue source necessitated the Commission to plan for achieving future results with fewer resources. To this end, Commission staff has aggressively pursued funding sources to maximize strategic investments. In 2010, the National Institutes of Health (NIH) awarded a $998,524 three-year grant to the Orange County community for the development and application of research geared to community based practice and health initiatives. The University of California, Irvine (UCI) was the lead agency for the project; 57 percent of the total award was contracted from UCI to the Commission to manage funds designated for community participation in the project. This agenda item provides a final report on local accomplishments achieved through the federal grant award.

BACKGROUND:

In 2009, the Commission worked with the University of California, Irvine (UCI) and other community partners to develop a responsive proposal to the National Institutes of Health (NIH) for consideration for the "Building Sustainable Community-Linked Infrastructure to Enable Health Science Research" grant opportunity (Attachment 1). The NIH recognizes that in order to maximize the relevance, dissemination, and implementation of health science research for the public, communities must have the opportunity to be actively engaged in formulating research questions; designing, and conducting research; and translating the application of research findings to community-based practice and public health initiatives.

In 2010, UCI was notified by NIH that funds had been awarded for implementation of Orange County's proposed project. In order to assure that a majority of these funds would be committed to support the infrastructure needed for community collaborative research, UCI and community partners proposed that project funds designated for the community be contracted to the Commission. No Commission dollars were used for a cash match for the project.

Project Scope

In order to meet an information gap in Orange County, the Orange County Alliance for Community Health Research was established. Although the project title was initially referred to as the Center for Community Health Research, project partners changed the name to "The Alliance" since it better reflected the intent to build collaborative partnerships versus a bricks and mortar location.

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The Alliance has assisted in promoting connections between community organizations and project partners. The project scope designated for the community was carried out primarily through Community Research Associates (CRA). The NIH established the role of CRA's as community representatives who are respected community health members or experts with a successful track record in community-based programs and projects. The CRA's were responsible for and accountable to the community and the collaboration for implementation of the project aims and stewardship of resources. The Commission's evaluation team has been involved in each of the Alliance's major activities, specifically as they related to young children.

Last week, the Alliance held a community conference to recognize and celebrate the achievements accomplished over the past three years. Presentations were given by academic and community partners who were funded through the grant to address areas of community need. One Campus-Community Research Project was the evaluation of birth and economic outcomes with MOMS Orange County. This effort will assist MOMS Orange County in being competitive for national funds that require documentation of evidence based/evidence informed results. A summary of the Alliance's grant accomplishments achieved over the past three years is included on Attachment 2. The summary includes information developed for the poster session for MOMS Orange County and Child Guidance Center which were presented recently at the National Clinical Translational Science Center conference in Bethesda, Maryland. Findings from implementation of the three year project will be incorporated in both the Commission's program review panels for consideration and related planning processes.

STRATEGIC PLAN & FISCAL SUMMARY:
The project was reviewed in relation to the Strategic Plan and is consistent with the Capacity Building goal to foster a consumer-oriented, easily accessible system of services that is responsive to local needs and achieves results. This agenda item includes no requested funding action.

PRIOR COMMISSION ACTIONS:
- November 2010 – Authorized contracts to receive funds and implement the Federal grant award for "Building Sustainable Community-Linked Infrastructure to Enable Health Science Research"
- September 2010 – Received an update on federal grant proposals and awards, as a financial sustainability strategy
- March 2010 – Received progress report on strategies for securing government, corporate and foundations grants for improving the self-sufficiency of Commission grantees

RECOMMENDED ACTION:
Receive final report

ATTACHMENTS:
1. Federal Grant Project: Orange County Center for Community Health Research
2. Orange County Alliance for Community Health Research Final Report

Contact: Alyce Mastrianni

Federal Grant
Project: Orange County Center for Community Health Research
Summary of Terms and Conditions

Project Title	Orange County Center for Community Health Research
Source of Funding	National Institutes of Health: Building Sustainable Community-Linked Infrastructure to Enable Health Science Research
Lead Agency	Dr. Dan Cooper, Pediatrics University of California, Irvine School of Medicine
Other Participating Agencies	• California State University, Fullerton • Children and Families Commission of Orange County • Children's Hospital of Orange County • County of Orange Health Care Agency • St Jude Medical Center • Community Action Planning Group / UCI Institute of Clinical and Translational Science • Other Community Agencies
Focus of Grant	**Vision:** Community and Academic Health Center working together to develop, implement, and disseminate clinical discoveries that result in improved health status for the diverse communities of Orange County. **Mission:** To improve the health and well being of Orange County through collaborative research and supporting sustainable research, dissemination of evidence-based best practices to inform local health decisions.
Project Funding	$430,896 - UCI designated project funding $567,628 - community funding to be contracted through Commission $998,524 - total funding for 3 year project
Specific Project Aims	1. Establish the Orange County Center for Community Health Research to facilitate sharing of health research information and technical assistance for health research. 2. Conduct community health research training for community agencies and researchers. 3. Establish a community forum to develop a community health research agenda for Orange County and link community members with research resources.
Commission Role	Receive and manage funds designated for community participation in the project.
Fiscal Intermediary - Community Funding	Subcontracted through Public Health Foundation Enterprises, Inc to administer community funds designated for: - Three part-time Community Research Associates - Stipends for community agencies to release staff to participate in trainings - Technology and equipment to support project aims

Orange County Alliance for Community Health Research
Increasing the community's access to important health data and research.
www.HealthierOC.org

Final Report

Mission	Improve the health and well being in Orange County's diverse population through collaborative research and by supporting sustainable research and dissemination of evidence based best practices to inform local health decisions.
Purpose	Create an infrastructure in Orange County that will increase the capacity of community organizations and universities to engage in health research partnerships, also known as community-based participatory research (CBPR). The strategy to achieve this purpose was through the development of **three Specific Aims** designed to meet the need for community engagement in Research.
Aim 1 *Facilitate the dissemination of health research information and data and the provision of technical assistance for health research to community agencies by establishing the Orange County Center for Community Health Research Portal*	Accomplishment: Created a centralized clearing house for health research conducted in Orange County. The Alliance collaborated with advisory board members to facilitate the dissemination of health research information and date provision through the establishment of the www.HealthierOC.org. Web portal. The web portal is a comprehensive site that not only provides information and data on Health Research, especially in Orange County, but also includes a Health Researcher Directory designed to facilitate the ongoing development of Community-Based Participatory Research partnerships. Relevance for Commission: The web portal ensures a venue to provide key Commission evaluation reports to the public. Currently posted reports include the Conditions of Children and Healthy Places, Healthy People.
Aim 2 *Increase capacity and readiness to conduct collaborative community health research among community agencies and researchers by providing trainings and mentorship in community-based participatory research (CBPR).*	Accomplishments: Training Curriculum, Technical Assistance and Support – The Alliance has increased capacity and readiness to conduct collaborative community health research among community agencies and researchers through CBPR training and technical assistance provided in two training series and one-on-one consultation from project Community Research Associates. Developed a five – workshop series CBPR training curriculum. Mentor Pairings – Thirteen academic faculty and community based organization pairings were developed and supported. Health Research Partnership Projects – Developed through a competitive application process, four funded academic and community health research partnerships were selected that addressed prenatal care, domestic violence, childhood obesity and adult obesity, healthy eating and active living.

	For these projects, two poster presentations from pairings were provided at the National Clinical Translational Science Associations conference in August 2013 in Bethesda, Maryland, and one poster was presented at the Institute on Violence, Abuse and Trauma conference in San Diego on September 8th. Relevance for Commission: Many of the Commission contractors participated in the Aim 2 opportunities. Copies of posters for Commission contracts include (and are attached): • Evaluating MOMS Orange County Maternal-Child Health Coordination Project for Improving Birth Outcomes • Preliminary Findings: Coaching to Decrease Childhood Obesity
Aim 3 *Develop a community health research agenda for Orange County by facilitating an annual planning retreat and ongoing team building workshops*	Accomplishments: Engaged the community for input on health priority areas. Developed team building workshops around the 8 priority topics. Workshop participants included representatives from a wide-array of public and private community-based organizations and university faculty. The workshops provided opportunities for researchers and community partners to become familiar with work being done in Orange County. Data highlighted at workshops provided opportunities for community partners to translate data into improved and more targeted practices. Relevance for Commission: Both Commission contractors and collaborative partners participated in the team building workshops which included incorporation of efforts into countywide projects. For example: • Low Birth Weight efforts were incorporated into the 18th Annual Conditions of Children's Report. • Overweight and Obesity process identified a small amount of funding to assist in analyzing WIC data across the four Orange County providers to assist in filling a local data gap. • Child Maltreatment literature review was provided to the Commission and County to assist in the development of the Medical Director for Social Services position. • Perinatal Depression developed an algorithm for practioners to use which has a protocol to access and refer pregnant women and new moms. • Vision Data Sharing developed an algorithm for sharing data across agencies by screening, secondary screening, and tertiary screening.
Project Sustainability *Recommended next steps for continuation of the health research infrastructure project in Orange County.*	Aim 1 – The website will be hosted and managed by the Community Engagement Unit of the Institute for Clinical Translational Science. Aim 2 – The California-Nevada Public Health Training Center has been identified which offers free online community-based participatory research training. In addition, video and PowerPoint presentations from Orange County's presentations is available on the web portal: www.ochealthieroc.org Aim 3 – The UCI Community action planning group will merge with the Orange County Alliance for Community Health Research and will continue the identified work of the Alliance.

Evaluating MOMS Orange County Maternal-Child Health Coordination Program for Improving Birth Outcomes

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Jung-Ah Lee[1], Michele Silva[2], & Julie Vo[2]
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Attachment 2A

Introduction

- In Orange County, **255** pregnant women received home visiting services by Nurse Family Partnership in 2010
- MOMS Orange County **modified evidence-based Nurse Family Partnership to integrate a community health promotion strategy**
  - MOMS provides prenatal and postnatal home visitation services to an estimated **3,100 at-risk pregnant women** in Orange County annually
  - Registered nurses supervise highly trained paraprofessionals who serve as home visitors
  - Pregnant women who need more intensive medical oversight are referred promptly to public health nurses
  - The home visit period has been shortened to one year.

Objective

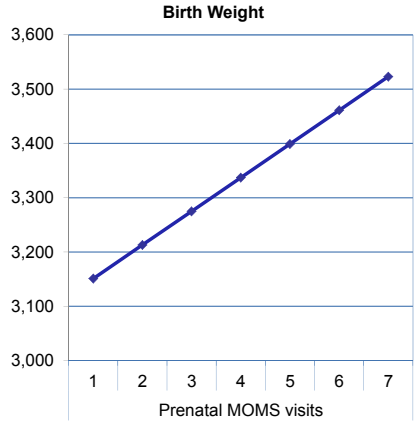
- To provide evidence about the effectiveness of MOMS Orange County home visitation program on birth outcomes

Methods

- Design
  - Community engaged research
  - Secondary data analysis
- Data collection
  - Home visitors collected the data while they conducted home visits during 2009-2010
- Participants
  - 2028 subjects
- Measures
  - Self-reported demographics, prenatal and postnatal assessments
- Analysis
  - Multiple regression models for continuous birth outcomes
  - Controlled for 10 covariates

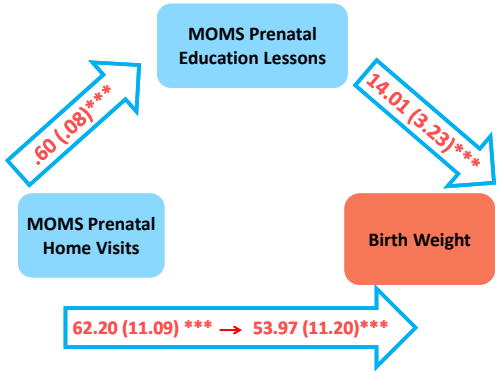
Results

Figure 1. Association Between MOMS Prenatal Visits and Birth Weight



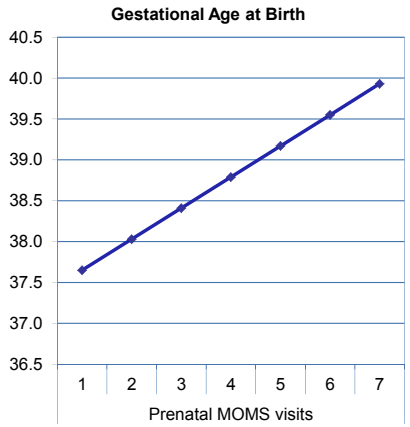
The number of prenatal visits significantly predicts birth weight, b=62.20, B=.24, $p < .001$

Figure 2. Mediation Between MOMS Prenatal Visits and Birth Weight



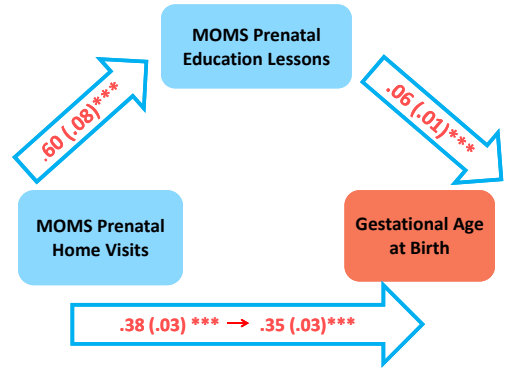
The association between the number of prenatal visits and birth weight was significantly mediated by MOMS prenatal education lessons, Sobel t=3.80, $p < .001$

Figure 3. Association Between MOMS Prenatal Visits and Gestational Age at Birth



The number of prenatal visits significantly predicts gestational age, b=.38, B=.47, $p < .001$

Figure 4. Mediation Between MOMS Prenatal Visits and Gestational Age at Birth



The association between the number of prenatal visits and gestational age at birth was significantly mediated by MOMS prenatal education lessons, Sobel t=4.50, $p < .001$

Results

Table 1. Descriptive Demographics

Characteristics	% or M (SD)
Maternal Age	27.80 (6.60)
Monthly Income	$1,252 (929)
Ethnicity	
Latino	77%
Vietnamese	12%
Caucasian	6%
Other	5%
Education	
< High School	44%
High School	32%
At Least Some College	24%
Other	5%
GA at Entry to Study	19 (8.80)
Prenatal Visits	3.40 (2.00)
Prenatal Education Lessons	5.92 (3.76)

Conclusions

- MOMS Orange County maternal-child health coordination program contributes to positive birth outcomes by **decreasing preterm and low birth weight births**.
- More rigorous research with experimental design and objective data collection is needed to validate the preliminary evidence.

Acknowledgements

This Research supported by Award Number RC4RR031404 from the National Center For Research Resources. The content is solely the responsibility of the authors and does not necessarily represent the official views of the National Center For Research Resources or the National Institutes of Health

Preliminary Findings: Coaching to Decrease Childhood Obesity

Attachment 2B

Marta Shinn, Ph.D., Child Guidance Center Inc.

Introduction

Childhood obesity is a rapidly growing epidemic in the United States, with about 20% of children reported as overweight or obese. This study examines the efficacy of Parent-Child Feeding Interaction Therapy (PC-Fit), an intervention using coaching to reduce maladaptive feeding and eating practices causing obesity in children ages 2 to 10. Using a pre-post randomized experimental design, PC-Fit is compared to a nutritional counsel/treatment as usual (TAU) control. PC-Fit utilizes a live coaching intervention to guide caregivers through a snack that is conducted at a community mental health agency. The PC-Fit coach observes, codes, and coaches all interactions during the meal including feeding and parent-child communication from behind a one-way mirror (see Figure 1). PC-Fit coaching focuses on decreasing maladaptive parenting strategies related to food consumption, while implementing empirically-based positive psychology interventions and modeling techniques to improve mealtime interaction, behaviors, and communication.

Central to the PC-Fit model is implementation of the division of responsibility, where the parent decides what foods are served, and when and where the food is served. The child decides if they feel hungry and how much to eat. When families follow the division of responsibility, children learn to trust their body's hunger/satisfaction cues, and parents learn and rehearse how to expose their child to healthy food options.

PC-Fit identifies clear and empirically supported behaviors to promote and avoid in successful treatment. The appropriate behaviors are represented by the acronym "Fit" and the inappropriate behaviors are represented by "ABCDE."

Figure 1. PC-Fit Treatment Room

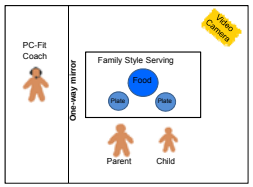


Figure 1. Diagraph of PC-Fit treatment room depicting room set-up, coach, and parent-child dyad.

In "Fit," "F" stands for preparation of Food from food groups and family style serving. "I" stands for Intuitive Eating, and "T" stands for Table Talk. During the meal, the coach prompts the parent to present the Food Family-Style, placing all the food at the center of the table, which allows the child to select the food items of their choice. For the "I" skill, the coach prompts the parent to model eating to satisfaction and using mealtime manners. Table Talk skills involve the coach encouraging the parent to engage in enthusiastic non-food-related conversation with their child while they eat. In "ABCDE," "A" stands for Artificial Comments such as attempting to label one food item as being more appetizing than another. "B" stands for Bribing, as in using food as a tool of negotiation. "C" stands for Coaxing or trying to pressure the child into eating parent provided foods. "D" stands for Defining Preferences, such as labeling for the child what foods they like or dislike; thus suggesting to the child that food preferences are fixed, hindering their development of a balanced, variable diet. Lastly, "E" stands for Emotional Eating; the parent is coached to avoid establishing emotional associations with food, such as using food to comfort or to console the child.

Methodology

Given an estimated attrition rate of 30%, we determined that we needed to recruit over 100 dyads for screening, and treat 70 participants (35 parent-child dyads for each group). Participants receive services at either the Child Guidance Center (CGC), a community mental health agency, or at Dr. Riba's Health Club (DrRHC), a pediatric health clinic treating childhood obesity. A BMI over the 85th percentile based on the child's age and gender is required for eligibility.

Study participants are randomly assigned to Parent Child Feeding Interaction Therapy (PC-Fit) or treatment as usual (TAU). Pre and post, participants' height, weight, and waist circumference (WC) are obtained. The parents rate child behaviors and parenting experience on the Parenting Stress Index- Short Form (PSI), the Behavioral Pediatrics Feeding Assessment Scale (BPFAS), and the Achenbach Child Behavior Checklist (CBCL).

The PC-Fit group receives an 8-week intervention at CGC that consists of a coded mealtime baseline, a didactic session, four coaching sessions, a post treatment coded observation, and booster sessions when clinically indicated. During the coaching sessions, parents are guided through live application of the division of responsibility and "Fit" skills, and are coached to extinguish "ABCDE" behaviors. Each visit, meals are coded for Fit and ABCDE. Additionally, WC and BMI are calculated at the end of each coaching session (see Figure 2).

TAU participants attend 4 to 8 visits within 8 calendar weeks that includes assessment, treatment planning, and clinical care with a pediatrician or registered dietitian. Visits can consist of counsel about the psychology of feeding, recommendations for modifying diet and parent feeding practices, encouragement of physical activity, and evaluation and treatment of other medical problems.

Figure 2. PC-Fit Treatment Guideline

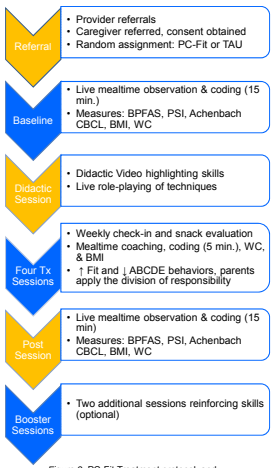


Figure 2. PC-Fit Treatment protocol and elements of each phase of treatment.

Study Purpose

It is hypothesized that PC-Fit participants will show decreased BMI and improvements in the variety of foods eaten, their eating to satisfaction, pleasantness of mealtimes, and mealtime communication as compared to treatment as usual controls. The study aims to evaluate the following hypotheses:

Hypothesis One (H1): We will observe a significant increase in PC-Fit parents' use of "Fit" skills and a decrease in "ABCDE" from pre- to post- treatment.

Hypothesis Two (H2): We will observe a more significant decrease in levels of parenting stress (as measured by the Parenting Stress Inventory) from pre- to post-treatment in PC-Fit participants than in those assigned to the TAU condition.

Hypothesis Three (H3): We will observe a significant improvement in parents' assessment of children's feeding problems (as measured by the Behavioral Pediatrics Feeding Assessment Scale) from pre- to post-treatment in PC-Fit participants compared to those assigned to TAU.

Hypothesis Four (H4): We will observe a more significant decrease in levels of child behavior problems (as measured by the CBCL) from pre- to post-treatment in PC-Fit participants than in those assigned to TAU.

Results

Sample characteristics

Eighteen caregiver-child dyads completed treatment with 11 assigned to PC-Fit and seven to TAU. The mean age of the children is 7.44, with 13 being female and the remaining five male. Eleven percent of the caregivers are biological fathers, 83% are biological mothers, and 6% are grandparents. Eighty-three percent of the caregivers are Latino and 17% are Caucasian. The average age of the parents is 36.67.

Analyses

Non-parametric statistics were used in all analysis; Chi-Square for categorical data and Mann-Whitney tests were used to analyze group differences with continuous data. Tests of significance were two-tailed, as hypotheses did not specify the direction of change.

Findings

H1: The results showed that the PC-Fit parents' use of discouraged speech decreased (e.g., artificial comments, coaxing, and defining preferences). Specifically, at baseline, PC-Fit parents had an average of one artificial comment, nine coaxes, and 1.8 defining preference. At post treatment, they had zero artificial comments, zero coaxes, and .17 defining preferences (see Figure 3.1). We also observed an increase in the positive skills. At pre, on average parents served food family style 4.8 % of the time, modeled intuitive eating 0.17 % of the time, and engaged in Table Talk 1.33 % of the time. By post, their abilities were observed to significantly increase. Family style serving was observed 7.5 % of the time, intuitive eating was displayed 3.3 % of the time, and they engaged in Table Talk 2.3 % of the time (see Figure 3.2).

H2: No differences between groups were observed on changes in parenting stress (PSI- SF) from pre to post-intervention.

H3: PC-Fit participants' scores on the BPFAS yielded a more significant decrease in the frequency of parent reported feeding problems and in the frequency of child problem eating behaviors from pre to post treatment (see Figures 4.1 and 4.2) than did TAU participants.

H4: No statistically significant differences were found in child behavior problems as rated on the Achenbach CBCL.

Figure 3.1. Negative Feeding Behaviors

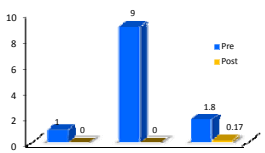


Figure 3.1. Parents use of ACD behaviors at pre and post treatment. A= Artificial Comments, C= Coaxing, D= Defining Preferences.

Figure 3.2. Positive Feeding Behaviors (Fit)

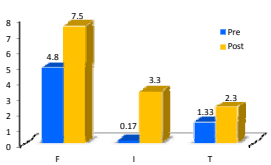


Figure 3.2. Parents use of "Fit" skills at pre and post treatment. F= Food selection and Family Style Serving, I= Intuitive Eating, T= Table Talk.

Results (continued)

Figure 4.1. BPFAS Parent Frequency

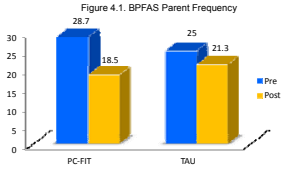


Figure 4.1. Frequency of parent reported feeding problems pre and post treatment.

Figure 4.2. BPFAS Child Frequency

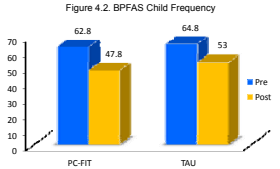


Figure 4.2. Frequency of child problem eating behaviors pre and post treatment

Discussion

Coaching psychology has great potential for use within the healthcare field. This study highlights how it can be effectively applied to reshape parent feeding practices.

With the recent emphasis in the fields of psychology and mental health on positive psychology, building abilities and promoting well-being are increasingly recognized as important clinical goals. Decreasing pathology is still important, but is insufficient for meeting the needs of the whole person. These preliminary findings reveal that with the help of a live coach, parent's positive feeding practices can be developed in as few as four live mealtime coaching sessions.

Research shows that parent use of artificial comments, bribing, coaxing, defining children's food preferences, and emotionalizing food is associated with maladaptive eating behaviors in their children - such as ignoring of satiety cues, over eating, refusing of healthy food options, and eating to sooth negative affect. Moreover, these behaviors can also result in mealtime tantrums and other behavioral problems in children. This study showed that clinicians can coach parents to decrease these maladaptive behaviors and replace them with positive feeding practices. In fact, clinicians can replace unhealthy feeding behaviors (e.g., parent offering unhealthy foods, engaging in power struggles over food with their child) with the positive caregiver feeding practices that were identified by the study as helpful feeding strategies (e.g., proper food selection, family style serving, modeling of intuitive eating, use of table talk communication skills, and applying the division of responsibility).

Implications

The current study demonstrates clinically relevant implications with regard to coaching as a viable treatment for reducing feeding practices that are known to play a role in pediatric obesity. The findings also suggest a promising empirical basis for the application of coaching in the reduction of eating disordered behaviors. Specifically, this study highlights that coaching resulted in decreased behaviors associated with negative emotions prompted by poor parent-child interactions (i.e., parent use of artificial comments, coaxing, and defining preferences) that may contribute to overeating and less enjoyable mealtimes. Moreover, the use of coaching interventions to promote positive interactions during mealtimes may guide practitioners in their efforts to help parents address obesity related issues with their children. Specifically, research suggests that negative affect may contribute to unhealthy feeding behaviors, which may exacerbate existing mental health concerns. Therefore, coaching techniques may be particularly useful when treating obese children who suffer from concurrent psychological conditions (e.g., depression, anxiety, poor self-esteem, impaired social relationships).

Limitations

This study presents initial findings of "As Treated" analyses. Generalization of the present findings is limited due to the small sample of treatment completers. This research is ongoing and the expectation is that as more participant data is obtained, additional research questions can be answered, and statistically significant differences may be identified.

So far, while improvements in parent feeding practices have been observed, statistically significant decreases in weight or waist circumference have not been observed. We anticipate that with more study participants, we will clarify whether coaching parents to modify their feeding practices can result in decreases in their child's weight.

The researchers recognize that BMI and WC are imprecise and unsophisticated measures of weight change and as such have begun to develop a phase two protocol to include measures that are more sensitive to change (e.g. biological markers). The phase two protocol is being developed in collaboration with the University of California, Irvine's, Institute for Clinical and Translational Sciences, with the support of a grant from the Orange County Alliance for Community Health Research.

References

Please contact the author at mshinn@cgcinc.org for a complete reference list.

INSTITUTE OF COACHING AT MCLEAN HOSPITAL
HARVARD MEDICAL SCHOOL AFFILIATE

This project was funded by the Institute of Coaching at McLean Hospital a Harvard Medical School affiliate. The recommendations of this study are those of the author and do not represent the views of the Institute of Coaching.

ORANGE COUNTY ALLIANCE FOR COMMUNITY HEALTH RESEARCH

This poster is supported by Award Number RC4RR031404 from the National Center For Research Resources. The content is solely the responsibility of the authors and does not necessarily represent the official views of the National Center For Research Resources or the National Institutes of Health.

UC•IRVINE ICTS from lab to life.