NP30 COPASCities: Building Capacity for Food Systems Change for Childhood Obesity Prevention in South Carolina Communities

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Objective: Community organizing is a common approach to changing a variety of community systems. The steps in community organizing include issue identification, building a base of people affected by the issue and willing to work for change, taking action, developing leaders, and evaluation of newly emerging issues. In COPASCities, year 4 we catalyzed and ethnographically observed community organizing in 4 partner communities (C1-C4).

Description: Organizing campaigns included base building through a local food guide, house meetings, and a local food pledge drive (C1); taking action to improve access to healthy foods through a produce buying cooperative that offers the SNAP Healthy Bucks incentives (C2); developing leadership through recruiting family champions for child nutrition programs (C3) and capacity building programs, including 55 leaders completing the food systems change certificate program; and evaluation of newly emerging issues with the development of a second campaign to make safer routes to school in a community where a child died waiting at a school bus stop (C4).

Evaluation: Community organizing efforts increased the reach and sustainability of food systems change for obesity prevention by increasing community engagement in identifying relevant local issues, working for change, and building capacity for success. Organizing challenged existing power structures, and daily experiences of racism and classism shaped community leaders' perceptions of powerlessness. Decision case studies were developed to build the capacity of leaders to identify and navigate these challenges. Policy and practice briefs are available.

Conclusions and Implications: Creating systems change required leadership, development of a common vision, communication among partners, and shifting power.

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NP31 Niños Sanos, Familia Sana: A Multi-Component Intervention to Prevent Obesity in Mexican-Heritage Children in Rural California

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Objective: To fill a gap in knowledge related to effective interventions in Mexican-heritage populations, this study had four aims: slow down the rate of weight gain among

intervention children compared to controls; identify mediating factors related to economic and nutrition education intervention components; develop a culturally-adapted nutrition and physical activity curriculum for families; and increase cultural competency of university students.

Description: In 2012, the Niños Sanos, Familia Sana study began a three-year community-based intervention that provided a monthly voucher to buy fruits and vegetables; an enhanced, school-based, physical activity program; and nutrition and physical activity education targeting Mexican-heritage families with children ages 3-8 years. A comparison community received family educational programs (not nutrition-related).

Evaluation: Follow-up anthropometric measures were analyzed for 387 intervention and 313 comparison children. After three years, obese boys and girls had a significantly lower rate of body mass index gain in the intervention group compared to controls (interaction obesity status by treatment, $p=0.05$). Household purchases included a wide variety of produce, with bananas, apples, tomatoes, avocados, mangoes, strawberries, pineapples, cucumbers, limes, and oranges being most frequently selected ($n=227$). Frequency of consuming energy-dense foods decreased significantly in the intervention children over three years compared to controls ($n=175$, $p=0.008$).

Conclusions and Implications: This study will yield insights to guide government nutrition and food assistance programs in promoting behavioral change and preventing obesity in similar high-risk populations.

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NP32 A Data Summary of a Community-Based Participatory Research Project Targeted Toward the Prevention of Adolescent Obesity

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Objective: To develop a community-based program that targets overweight and obesity prevention among adolescents in limited resource, minority communities.

Description: Summary of analyzed data of a five year, tri-state, quasi-experimental project including six communities (one control and one intervention community from each state) who are responsible for creating and implementing one nutrition and one physical activity program addressing overweight and obesity among 6-8th grade youth.

Evaluation: Mixed methods approach used in collecting community food and physical activity environmental data, student health behavior questionnaire data, intervention community focus group data and community panel transcripts.

NP32 (continued)

Conclusion and Implications: Identifying a potential framework for creating community-focused, sustainable and effective adolescent obesity prevention programs.

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NP33 Enhancing Self Regulation as a Strategy for Obesity Prevention in Head Start Preschoolers

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Objective: To test the effect of 3 interventions: a nutrition education/obesity prevention program (Parents of Preschoolers Series (HS+POPS)); an intervention to improve children's emotional and behavioral self-regulation combined with POPS (Incredible Years Series (HS+POPS+IYS)); and usual Head Start exposure (HS alone) on preventing obesity in Head Start children.

Description: The cohort (n=697) was 50% male, mean age 4.1 ± 0.5 years, 51% white, 27% black, 11% Hispanic. Children were randomized by classroom to the 3 arms: HS+POPS+IYS (n=255); (2) HS+POPS (n=224); (3) HS alone (n=218).

Evaluation: There was no difference between study arms with regard to change from baseline to follow up in prevalence of overweight, obesity, or change body mass index z-score (BMIz) among overweight children; intake of fruits, vegetables, or 100% fruit juice; weekly physical activity, mean screen time, nutrition knowledge, or nutrition-related self-efficacy. POPS+IYS showed greater declines in sugar sweetened beverage intake compared to HS alone (0.53 servings/day at baseline and 0.42 servings/day at follow-up in HS+POPS+IYS, versus 0.52 servings/day at baseline and 0.57 servings/day at follow-up in HS alone; p=.01). Children in the HS+POPS+IYS group showed greater increases in teacher-rated General Adaptation standard scores on the Social Competence and Behavior Evaluation Scale as compared to HS+POPS (p<.001) or POPS alone (p<.001) (HS+POPS+IYS 48.4 at baseline versus 52.2 at follow-up; HSs+POPS 49.5 at baseline versus 50.7 at follow-up; HS alone 47.3 at baseline versus 48.2 at follow-up).

Conclusions and Implications: An intervention that improved children's self-regulation did not improve BMI or mediators of obesity, with the exception of reductions in sugar sweetened beverage intake.

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NP34 Demographic and Parenting Differences in the Niños Sanos, Familia Sana Communities

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Objectives: To examine baseline demographic characteristics and parenting dimensions of Niños Sanos, Familia Sana (NSFS) study participants in the intervention and comparison sites; and understand the mediating factors to parenting.

Methods: Household level and individual data (demographic and children's and mothers' BMI) were collected at the baseline along with the ARSMA-II (Cuellar 1995) for each eligible child in the study and their mothers. The Parenting Dimensions Inventory (PDI), shortened edition (PDI-S) (Power, 2002) was used to assess nurturance, inconsistency, and follow-through.

Results: In bivariate analysis, we found significant differences between the communities in the percentage of mothers born in Mexico, the number of years of education, the mothers' work status, acculturation, and the nurturance, inconsistency and follow-through parenting dimensions. Multivariate regression analysis showed mothers' years in the US (coef=0.7433, p=0.028), being married (coef=0.3611, p=0.062), and living in the intervention community (coef=0.3840, p=0.013) as strong predictors of the follow-through dimension. Mothers' years of education (coef=-0.061, p=0.010) and being married (coef=-0.397, p=0.051) were negatively associated with the inconsistency dimension. Mothers' years of education (coef=0.292, p=0.043), mothers' years in the US (coef=0.405, p=0.035), being married (coef=0.3352, p=0.007), and living in the intervention community (coef=0.334, p=0.001) were strong predictors of the nurturance dimension.

Conclusions and Implications: Communities in California's Central Valley with over 80% Mexican-heritage families may still be significantly different in level of acculturation, education and parenting style.

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NP35 Creating a Transdisciplinary Childhood Obesity Prevention Program: A Focus on Interprofessional Education and the Triple Aim

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Objective: To evaluate the effect of collaborative learning and experiential experiences provided within an ongoing graduate certificate program in Transdisciplinary Obesity Prevention (TOP) on perceptions and attitudes related to communication, teamwork, and interprofessional education, interprofessional interactions and collaboration, and community engagement.

Description: South Dakota State University (SDSU) and the University of Nebraska-Lincoln (UNL) collaborated to

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