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A Qualitative Exploration of Programs to Address Food Insecurity During the COVID Pandemic in Detroit, MI

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Learning Outcome: Upon completion, participant will be able to describe how food insecurity program operations changed during the COVID-19 pandemic, and to describe facilitators/successes and barriers/challenges to operations of these programs.

Background: The COVID-19 pandemic increased the need for food assistance due to surging unemployment, the closure of in-person schooling, and other factors, compounding the pre-existing elevated rates of financial hardship in the city of Detroit, Michigan. This posed a historic challenge to organizations that address food insecurity in Detroit: meeting the surging need for food while minimizing the risk of COVID-19 transmission.

Methods: This study aimed to identify how food insecurity program operations changed during the pandemic, and to examine facilitators/successes and barriers/challenges to program operations. Semi-structured interviews were conducted with staff at 13 organizations involved in addressing food insecurity in Detroit during the pandemic. Interviews were coded by two coders who discussed differences and reached coding consensus. Coded data were summarized, then used to create matrices and concept map displays for each organization.

Results: Nearly all programs changed to a contactless food distribution format, and most programs also experienced an increase in demand for food. Common successes/facilitators included being able to keep clients and staff safe from COVID-19, and waiving that eased program rules. Common challenges/barriers included the increased need for labor and food. Lack of funding was a barrier for some organizations, while others who experienced an increase in funding reported that it facilitated their work.

Conclusions: This research identified needs in programs addressing food insecurity during the COVID-19 pandemic, which can inform future disaster planning. Preparation for times of elevated food insecurity, such as public health or economic emergencies, should include plans regarding labor and food needs.

Funding Source: United Way of Southeastern Michigan

An Evaluation of the Suitability of Food Provided through the Arkansas Foodbank Backpack Program

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Learning Outcome: Upon completion, participant will be able to describe the perceptions of food suitability from parents of children receiving food from the Backpack Program.

Background: The Arkansas Foodbank (ARFB) Backpack Program provides food for children in 33 counties throughout the state whose families are food insecure. Foods include nutritious, cost-effective, easy-to-prepare items though few cultural foods are available and the suitability of the food provisions in Arkansas communities has not previously been described.

Methods: The purpose of this study was to determine if the food items offered are suitable and it was part of a larger mixed-methods study designed to comprehensively evaluate the perspectives of site coordinators, parents, and community stakeholders regarding the effectiveness of the ARFB Backpack Program. Links to a validated 35-item electronic survey were provided in each backpack and through a monthly newsletter.

Results: Of the surveys completed, 67.4% (n = 29) of the participants felt the foods provided met their child's food needs at home. More than half reported their child was satisfied with the offerings and that the food provided was enough to last over the weekend. Parents reported worrying less about meeting their child's food needs (62.8%, n = 27). No cultural barriers were noted by parents.

Conclusions: The Backpack Program allows children to have breakfast and lunch on the weekends without parents worrying about providing food. The ARFB must consider cost and availability of items when purchasing food, and adding more cultural items may not fit within cost constraints. Though participants were generally positive about the Program, more could be done to make it accessible to a more diverse population.

Funding Source: None

Assessing Body Measurements, Nutritional Behaviors, And Sleep Behaviors Following Implementation of mHealth in Appalachian State University College Students

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Learning Outcome: Upon completion, participants will be able to assess the potential impact of a mHealth-based health behavior and weight management intervention on college students. Chronic diseases such as obesity are common in college students. College students struggle to develop strategies to maintain healthy weight and lifestyle behaviors. mHealth programs are accessible to college students’ schedules. My Quest in the High Country collaborated with Appalachian State University (ASU) Student Health Services and the Blue Cross Institute for Health and Human Services Interprofessional Clinic to create a 24-week mHealth intervention to improve weight status, health behaviors and biometrics in ASU students. Recruitment of ASU students occurred through flyers, social media, and email. During pre-assessment, participant eligibility, informed consent, biometrics and health behaviors were collected. From weeks 1-12, participants received text messages (n=2/day), eNewsletters (n=1/wk), and physical activity feedback. At midpoint, Fitbits were returned and biometrics were taken. From weeks 13-24, text messages and eNewsletters continued. At post-assessment, biometrics and post-assessment surveys were collected. Statistical analyses included Wilcoxon Signed Rank, McNemar, paired t-test, and descriptive. Significance was set at p < .05. Participants (n=11) were female [72.7%], non-Hispanic (82%), and Caucasian (64%), with a mean age of 23.4. Significant (p < .05) improvements were observed in body weight, BMI, diastolic blood pressure, fruit and vegetable intake, and sedentary time. No significant changes occurred in systolic blood pressure, step count, physical activity minutes, or sleep score. mHealth interventions in college students may positively impact health and behavior change. Progress dropped after returning the Fitbit at week 12. In future studies, a larger student email list may increase sample size and participant diversity. Wearing the Fitbit for 24 weeks is preferable.

Funding Source: Appalachian State University Chancellor’s Innovation Scholar’s Program award

Assessment of Nutrition Literacy and Knowledge Among Rural Midwestern Schoolteachers

Author(s): J. Hagen1, M. Chrisman1, N. Marchello2, A. Skarbek1, M. Hastert3, P. Endsley4; 1University of Missouri-Kansas City, 2University of Central Missouri, 3University of Kansas Medical Center, 4Wells High School

Learning Outcome: Upon completion, participant will be able to describe the level of nutrition literacy and knowledge among rural Midwestern schoolteachers and potential associations between them.

Background: Rural communities have fewer supports for nutrition education which could affect diet quality of students and families. It is unknown the degree of nutrition literacy and knowledge that rural teachers possess to deliver information to their vulnerable students. No nutrition education training were being offered in rural school districts, which is concerning. The study aimed to describe the nutrition literacy and knowledge among rural Midwestern schoolteachers.

Methods: Cross-sectional online survey administered in March-April 2022 to teachers from seven rural Midwestern school districts. The survey included the validated 64-item Nutrition Literacy Assessment Instrument and 20 nutrition knowledge questions from the US Department of Agriculture’s MyPlate website. Descriptive statistics, bivariate correlations, and Mann-Whitney U tests were conducted to examine nutritional literacy and knowledge and their associations with significance set at P < .05.

Results: A total of 153 schoolteachers participated. The majority were female, white, taught at the elementary level, and averaged 10.7 (SD 8.3) years teaching experience. 57.5% never had nutrition education/training and only 37.8% included nutrition content in lesson plans. Average nutrition literacy scores were 45.8 (out of 64; SD = 2.9), with a mean age of 23.4. Significant (p < .05) improvements were observed in body weight, BMI, diastolic blood pressure, fruit and vegetable intake, and sedentary time. No significant changes occurred in systolic blood pressure, step count, physical activity minutes, or sleep score. mHealth interventions in college students may positively impact health and behavior change. Progress dropped after returning the Fitbit at week 12. In future studies, a larger student email list may increase sample size and participant diversity. Wearing the Fitbit for 24 weeks is preferable.

Conclusions: Nutrition literacy scores of ≥ 44 are associated with poor diet quality; sampled teacher scores here bordered that cutoff. These generally low nutrition literacy and knowledge scores are concerning given that schools are required to provide nutrition education as part of national school meal programs. Dietetic professionals could contribute to enhancing nutrition literacy and knowledge among Midwestern rural schoolteachers.

Funding Source: University of Missouri-Kansas City Funding for Excellence program

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