A Mixed-Methods Evaluation of Implementing a Statewide Online, Self-Paced Nutrition Education Program for Low-Income Populations

Darci Bell, PhD, RDN, LD, db99966@uga.edu; Brigitte A. Herron, PhD, brigo7@uga.edu; Jung Sun Lee, PhD, RDN, leecs@uga.edu

University of Georgia, Athens, GA

Abstract

Background: Current literature lacks studies examining the implementation of self-paced, online nutrition education programs, including outcomes such as barriers and facilitators to program implementation and uptake. This study explored positive and negative influences on the implementation of the University of Georgia Supplemental Nutrition Assistance Program Education (UGA SNAP-Ed) eLearning nutrition education program, Food eTalk, in various community- and clinic-based settings in Georgia.

Objective: To identify facilitators and barriers of Food eTalk implementation in relation to program participant activity measures.

Study Design, Settings, Participants: Longitudinal, mixed–methods included in–depth interviews with program facilitators conducted virtually and monitoring program activity during implementation (15.1 ± 3.5 months) as well as pre- (4.4 ± 2.6 months) and post-implementation (6 ± 0.0 months). eLearning program monitoring occurred independently. Interview participants (N=8, 100% female, 38% African American, 25% rural based) represented community- and clinic-based organizations serving low-income audiences. eLearning participants (N=2,484) were SNAP-Ed-eligible adult Georgians (±18 years).

Measurable Outcome/Analysis: Descriptive statistics and frequency measures summarized program usage data. Multi–corder abductive analysis included deductive coding of predefined constructs of the Consolidated Framework for Implementation Research (CFIR) and inductive methods to identify emerging themes.

Results: The self-paced nature of Food eTalk positively and negatively influenced implementation. Facilitators praised the program for being adaptable and compatible with their organizational goals and felt confident in the program’s longevity. Participants shared concerns over the effectiveness of their efforts to engage with potential Food eTalk participants to encourage program completion. Food eTalk registration typically increased during the implementation period, followed by a decrease during the post–implementation period. Registration counts surpassed program completion across all observed time periods. Elements of future program implementation should include goal setting, flexible and novel engagement strategies, and communicative efforts between administrative staff and facilitators.

Conclusion: Food eTalk implementation was determined to be feasible in all participating organizations and a sustainable programming option moving forward. Findings of this study can be used to inform implementation of self-paced, online nutrition education programs for low–income populations.

Methods

Study Design, Settings, Participants: Eight community- and clinic–based organizations offered Food eTalk to their clientele over an average period of 15.1 ± 3.5 months with eLearning activity monitored pre– and post–implementation for comparison.

Each implementing organization served a different county in Georgia, representing a combination of rural (25.0%) and urban (75.0%) populations.

In–depth, individual Zoom interviews were conducted post–implementation with individuals (100% female, 37.5% African American) representing each participating organization responsible for Food eTalk implementation.

The Consolidated Framework for Implementation Research (CFIR) informed various elements of study design and analysis.

Analysis:

• Program usage data was summarized with descriptive statistics and frequency measures.

• Multi–corder data analysis was performed with ATLAS.ti, including deductive coding of predefined CFIR constructs and the use of inductive methods to capture emerging themes.

Results

Food eTalk Implementation Activity:

Quantitative monitoring of Food eTalk activity showed registration counts surpassed program completion counts across all observed periods of pre–implementation, implementation, and post–implementation by 9.0–fold, 9.6–fold, and 5.6–fold, respectively. The registration–to–completion ratio was attributed to:

• Lack of motivation and human contact due to the self-paced nature of Food eTalk

• Prioritization of engagement goals rather than completion goals among implementing organizations

Implementation took place during the height of the COVID–19 pandemic, which could also explain greater activity during this period compared to post–implementation.

Results, Cont’d

CFIR Constructs Found to Impact Food eTalk Implementation:

• Compatibility had a positive impact as facilitators found the program to fit well with their other programs and the mission and vision of their organizations.

• Adaptability was found to positively impact Food eTalk implementation. Facilitators felt the program was flexible and allowed them the opportunity to make the program their own.

• Facilitators identified a Tension for Change and a need for technology–based programs that initially drew them to Food eTalk. They also felt this was a marketable program for their audiences, eliminating a need for transportation or extra funds to attend class.

Other Factors Impacting Food eTalk Implementation:

• Implementing organizations expressed intentions to continue offering the program to their audiences, keeping Food eTalk as “a tool in the toolkit” for clients who could not attend in–person classes.

• The COVID–19 pandemic was considered to be a “catalyst for change,” forcing many Food eTalk implementing organizations to meet a pre–existing need for technology–based nutrition education programs for their low–income audiences.

Conclusions

• Food eTalk implementation was determined to be feasible in all participating organizations and a reliable programming option moving forward.

• Elements of future program implementation should include goal setting, flexible and novel engagement strategies, and communicative efforts between administrative staff and facilitators.

• Findings of this study can be used to inform the implementation of self–paced, online nutrition education programs for low–income populations.

Background

Literature lacks studies examining the implementation of self-paced, online nutrition education programs, including outcomes such as facilitators and barriers to program implementation and uptake.

This study explored positive and negative influences on the implementation of the University of Georgia Supplemental Nutrition Assistance Program Education (UGA SNAP-Ed) eLearning nutrition education program, Food eTalk, in a variety of community- and clinic–based settings in Georgia.

The Consolidated Framework for Implementation Research (CFIR) was selected to guide this study due to its suitability for studying conditions: Systematic review of intervention features and adherence. J Med Internet Res. 2020;22(8):e18355.


References


Acknowledgments

• The UGA SNAP–Ed Team, all partnering organizations who implemented Food eTalk during this study, and participants of Food eTalk.

• Questions and comments can be directed to Darci Bell, PhD, RDN, db99966@uga.edu

• Funding provided by USDA SNAP–Ed