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Online Nutrition Education Resources for Low-Income Georgian Populations: Interest Among Community- and Clinic-Based Organizations

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Outline

- **Background**
- **Objective**
- **Study Design, Settings, and Sample**
- **Results**
- **Strengths and Limitations**
- **Conclusions and Implications**



Background

- **Low-income populations and nutrition-related health disparities**
 - Higher rates of diet-related chronic diseases (e.g., obesity, hypertension, CVD, T2DM, and some nutrition-related cancers)
 - Poor diet quality related to unemployment, food, and housing-related insecurity
 - Limited access to health care (lack of health insurance, rural location)
 - Limited access to evidence-based nutrition and health education
- **Technology-based interventions: a potential answer?**
 - Education delivered via technology (e.g., websites, text messages, emails, social media, etc.)
 - Guided by behavioral change theories and evaluated for effectiveness among target populations
 - Accessible, flexible, and low-cost options to provide nutrition education

Laraia et al., 2017; Van Rhoon et al., 2020; Young et al., 2019; Dunn et al., 2014



UGA SNAP-Ed eLearning Programs

- Innovative, mobile-friendly online eLearning nutrition education
- Based on comprehensive needs assessment and formative evaluation
- Featuring:
 - Visual, short lessons, user friendly
 - Cultural influence
 - Voiceover and closed captioning



Food eTalk	Food eTalk: Better U
<ul style="list-style-type: none">▪ 6 Lessons▪ 8-12 minute/lesson with additional cooking videos▪ 4 'just-in-time' videos▪ DASH diet principles	<ul style="list-style-type: none">▪ 4 Lessons▪ 2-3 minute/lesson▪ Cooking videos, exercise videos, 'just in time' videos▪ DPP principles

- Research-tested, evidence-based SNAP-Ed program included in the SNAP-Ed Toolkit from 2019



Study Objective

To examine the current status of nutrition education and needs for online nutrition education resources among low-income Georgians from community- and clinic-based health care providers' perspectives



Study Design

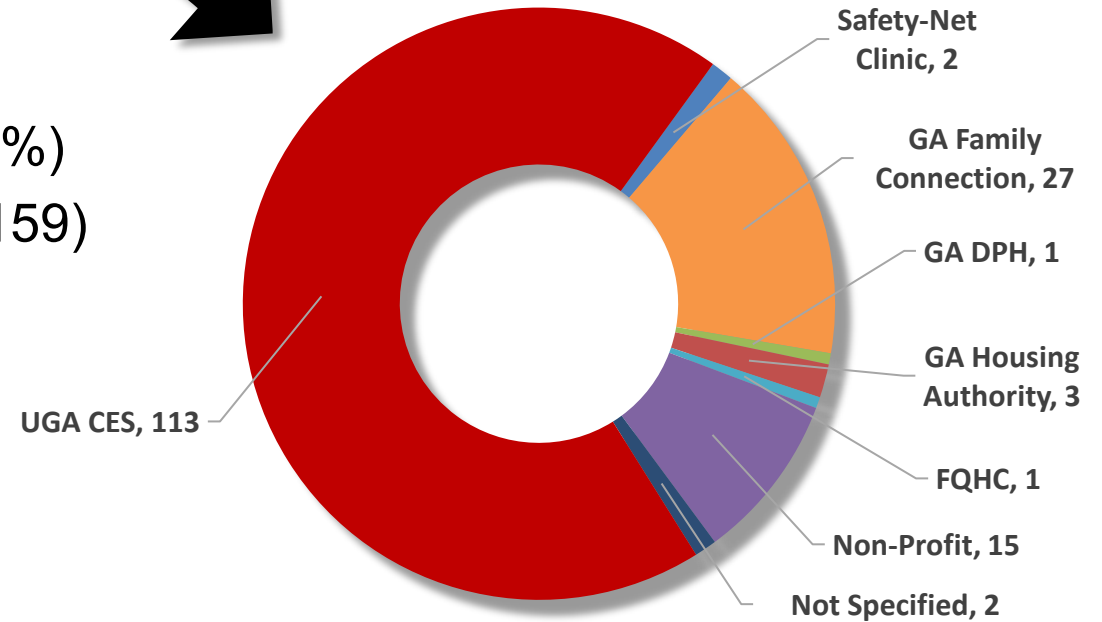
- **Statewide, cross-sectional online survey with community- and clinic-based organizations (CBOs)**
 - Questions assessing nutrition education programs, partnerships, and eLearning experience and interest
 - **University of Georgia Cooperative Extension Services (UGA CES)**
 - Purposive sampling methods
 - January 2020
 - **Other CBOs**
 - Safety-Net Clinics, Federally Qualified Health Centers (FQHCs), Non-Profit Organizations, GA Family Connection Partnership, GA Department of Public Health and GA Housing Authorities
 - Convenience sampling methods
 - October 2020
- **University of Georgia IRB (PROJECT00000677)**



Study Sample

- **164 key informants participated and provided consent**

- UGA CES (n=113, 69%) and CBOs (n=51, 31%)
- Representing 68% of Georgia counties (108/159)
- Age: 43.4 ± 11.3 years
- 86.9% female
- 19.0% African American, 2.5% Hispanic
- 62.7% rural



Nutrition Education Currently Offered

- **About 75% currently providing nutrition education resources to their clients**
 - UGA CES: 87.5%
 - CBOs: 54.9%
- **Only 14% currently provide eLearning programs**

Nutrition Education Resources, %	UGA CES	CBOs	Combined
Print materials	94.3	78.6	89.8
In-person classes	71.4	39.3	62.2
Website materials	51.4	42.9	49.0
eLearning programs	14.3*	14.3	14.3
Webinars	2.9	--	2.0
Nutrition counseling	--	32.1	9.2
Other			
- Cooking demonstrations			
- Online resources via email, Facebook, etc.	17.1	17.9	17.3
- Phone calls to clientele			

*UGA specific eLearning programs were specified



Interest in Offering eLearning Nutrition Education

- **About 77% are interested in offering eLearning nutrition education to their participants**
 - UGA CES: 76.5%
 - CBOs: 78.5%
- **Of those who expressed interest...**
 - 25% were not currently offering nutrition education
 - Higher among rurally-based offices/organizations
 - Preferred format: scenario or game-based learning

Desired eLearning Topics, %	UGA CES	CBOs	Combined
Eating healthy on a budget	93.2	97.5	94.9
Cooking healthy recipes	88.1	87.5	87.9
How to be more physically active	72.9	82.5	76.8
Weight management	67.8	67.5	67.7
Disease-specific diet recommendations (e.g. diabetes management)	72.9	70.0	71.7
Food safety	71.2	45.0	60.6
Federal assistance program information (WIC, SNAP, etc.)	39.0	92.5	60.6
Other	3.4	2.5	3.0

Perceived eLearning Benefits and Challenges

Perceived Benefits, %	UGA CES	CBOs
Additional nutrition education resources offered	81.8	84.8
Alternative nutrition education resources for those who cannot attend in-person classes	68.8	71.7
Better access to potential clients	63.6	32.6
Greater ability to reach a new tech-savvy generation	66.2	37.0
Increase in overall program participants	59.7	--
Strengthened partnerships within UGA Cooperative Extension	53.2	--
Expanded skillset for personnel involved in administration	32.5	30.4
Other	2.6	6.5

Perceived Challenges, %	UGA CES	CBOs
Support or interest from staff	35.1	14.9
Support or interest from board of directors	--	14.9
Funding	--	74.5
Personnel	27.3	40.4
Space/rooms for administration	28.6	21.3
Access to technical assistance when needed	51.9	42.6
Client interest	58.4	70.2
Client motivation	59.7	76.6
Prior negative experiences with eLearning programs	7.8	14.9
Other	14.3	2.1



Strengths and Limitations

Strengths

- Included a representative statewide sample of UGA CES employees and CBOs
- Provides preliminary data to inform future UGA SNAP-Ed eLearning program implementation

Limitations

- Self-selection bias
- Self-report bias
- Research timeline in relation to COVID-19 may have contextual influence on answers given from CBOs



Conclusions and Implications

- The majority of UGA CES and CBOs serving low-income Georgians are interested in offering online nutrition education programs as additional and alternative nutrition education resources
- Future research is needed to address perceived challenges in implementing online nutrition education programming through UGA CES and CBOs
 - Technical assistance, equipment, and resources needed
 - Client motivation, interests, and program experiences
 - eLearning implementation models and toolkits



References

- Laraia, B. A., Leak, T. M., Tester, J. M., & Leung, C. W. (2017). Biobehavioral factors that shape nutrition in low-income populations: A narrative review. *American Journal Of Preventive Medicine*, 52(2S2), S118–S126. <https://doi.org/10.1016/j.amepre.2016.08.003>
- Van Rhoon, L., Byrne, M., Morrissey, E., Murphy, J., & McSharry, J. (2020). A systematic review of the behaviour change techniques and digital features in technology-driven type 2 diabetes prevention interventions. *Digital health*, 6, 2055207620914427. <https://doi.org/10.1177/2055207620914427>
- Young, C., Campolonghi, S., Ponsonby, S., Dawson, S. L., O'Neil, A., Kay-Lambkin, F., McNaughton, S. A., Berk, M., & Jacka, F. N. (2019). Supporting engagement, adherence, and behavior change in online dietary interventions. *Journal of Nutrition Education and Behavior*, 51(6), 719–739. <https://doi.org/10.1016/j.jneb.2019.03.006>
- Dunn, C., Whetstone, L. M., Kolasa, K. M., Jayaratne, K. S., Thomas, C., Aggarwal, S., Nordby, K., & Riley, K. E. (2014). Using synchronous distance-education technology to deliver a weight management intervention. *Journal of Nutrition Education and Behavior*, 46(6), 602–609. <https://doi.org/10.1016/j.jneb.2014.06.001>



Thank You!

Questions?

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