Implementing Food Insecurity Screening Tool and Interventions in Primary Care Setting

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Introduction

- A holistic framework approach to patient care is essential as it goes beyond the limited lens of physiological illness. In recent years health professionals have incorporated social determinants into their patients' care to better address all their needs.
- Social determinants of health are defined as "conditions in the environments in which people are born, live, learn, work, play, worship, and age that affect a wide range of health, functioning, and quality-of-life outcomes and risks" (Centers for Disease Control and Prevention ,2021)
- One social determinant of health that affects millions of Americans daily is food insecurity (FI). FI is "the disruption of food intake or eating patterns because of lack of money and other resources" (United States Department of Agriculture, 2020).
- This study outlines how providers, including doctors and nurse practitioners, can play an essential role in screening and identifying patients experiencing FI and connect them to community resources.

Background & Significance

- According to the United States Department of Agriculture, 1 in 9 Americans is food insecure.
- FI disproportionately affects African Americans, Hispanics and women than any other groups (U.S. Department of Agriculture, 2020).
- In 2018, 774,860 people were FI in New Jersey (Health Indicator Report of Food Insecurity, 2020).
- Essex County has the highest rate of food insecurity at 13.5%(Community Food Bank of New Jersey, 2020). .
- FI is experienced in low-income urban areas and middle-class suburban communities; however, the COVID-19 pandemic has changed this.
- Current data has projected that FI can increase to 42 million individuals because of the pandemic (Feeding America, 2021).

Aims and Objectives

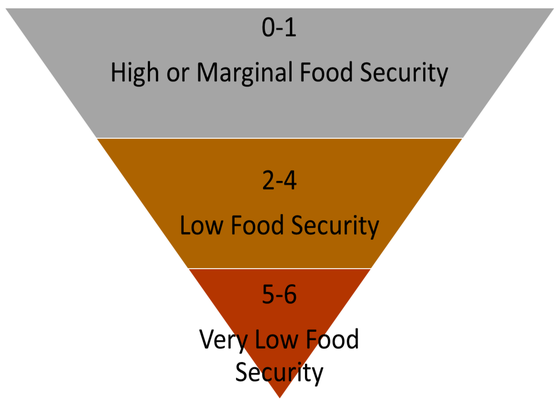
The project aimed to improve food access to the community.
The objectives of this project are as follows:
1.Implement a screening tool to assess patients experiencing FI.
2.Improve patients' access to food within a primary care setting by connecting them to community and federal programs.

Methodology

- This project was a quality improvement project survey with a convenience sample.
- 9 participants were enrolled to the program. Recruitment took place over the course of a month.

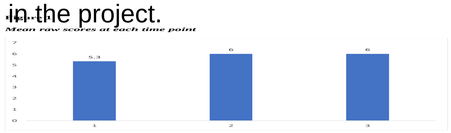
•Eligible patients were invited to participate. Following provision of consent, participants were given a USDA six -question survey that they filled out as a baseline.

- If a patient's scale score was between 2- 6 they were screened as positive for FI.
- 0-1 in a high to marginal food security, 2-4 low food security and 5-6 is very low food security.
- Patients who screened into the program were provided with a community resource packet that consisted of information on including food banks in Essex County and federal resources such as information on SNAP benefits.
- The participants will be followed for three months and will be administered the USDA FI survey each month to monitor progress.
- A 5-point Likert scale was given at the end of the project to analyze participant feedback. calculated.
- Raw food insecurity scores were compared over time (three-time points) using the analysis of variance (ANOVA) procedure for repeated measures.



Results

- All participants were African American females. The mean age of participants was 36.2 years (SD = 12.6). Mean household income was $25,666.7 (SD = 6,304.8). Mean BMI was 34.4 kg/m2 (SD = 6.4).
- Food security was very low throughout the study. Mean food insecurity scores were 5.3 (Time 1), 6.0 (Time 2), and 6.0 (Time 3).
- There was no significant change in mean food security scores over time F(2, 27) = 2.29, p = 0.134).
- Overall, participants disagreed with feeling embarrassed about accessing resources from food banks and with not knowing about resources like food banks or SNAP before participation in the project.
- They tended toward a neutral stance on average in response to food bank resources having a substantial impact on the ability to feed their family
- and agreed that they were feeling comfortable with being screened for food insecurity in the clinic and with worrying about how to feed themselves and their family prior to participation in the project.



Discussion

- This project was successful in screening patients for FI.
- However, it did not meet its other aim in improving FI scores through providing participants with information on community resources
- The post intervention survey showed that most of the participants took a neutral stance on the impact that resources like food banks had on improving access to. This sentiment can be based on past experiences with obtaining said resources.
- Future studies should assess barriers that affect individuals from obtaining known FI community resources.

Implications for practice

Healthcare policy

- Advocacy on a local level starts with first understanding the needs of the communities in which they serve.
- Nurses and Nurse Practitioners can appeal to professional organizations, to develop policies that would expand federal programs such as SNAP to a larger segment of the population

Clinical Practice

- Incorporating screening tool and interventions within workflow of clinic.
- Partnership with MEND on the Move Program.

Patient Care

Staff better equipped to address FI
Holistic approach to patient care

Quality and Safety

- Creating a culture that is comfortable with having conversation and addressing FI can improve patient outcomes.
- Value-based care is grounded on quality metrics that need to be met for payment for services to be made. Through screening and better understanding of FI, core measures in treating patients with FI can come to fruition.

Economics

- FI households contribute an additional $56.9 Billion dollars in healthcare costs (Berkowitz, Basu, Gundersen & Seligman, 2019).
- Improving FI can improve patient out comes and lower healthcare cost.
- Using Social determinants of Health ICD-10 codes to track social needs of patients, guide community resources, and observe trends.

Education

- This project educated the staff on food insecurity. They were able to see ways in which they could increase their services to their patients.

Patient's have an understanding about FI.

Conclusion

- FI is a serious social issue that has a dire impact in individuals in the American healthcare system. Interventions such as expanding SNAP benefits and funding food banks have been shown to have only partial impact on FI.