

Effectiveness of education on knowledge and participation of community programs

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ABSTRACT

Objective: To evaluate the effectiveness of providing education on the Low-Income Home Energy Assistance Program (LIHEAP), and the Supplemental Nutrition Assistance Program (SNAP Ed) on increasing knowledge and participation in these programs.

Design: Quasi-experimental design with an intervention group of food insecure adults.

Setting: Victory Highway mobile food pantry (MFP), Corning, NY

Methods: Participants were recruited for this study the day of the intervention. Effectiveness of this study was based on changes in pre- and post- questionnaire responses.

Participants: Participants were residents of Steuben and surrounding counties who attended the Victory Highway MFP. 44 participants completed the pre- intervention questionnaire, and 45 participants completed the post- intervention questionnaire

Intervention: The intervention included education provided in the form of handouts on LIHEAP, and SNAP Ed to all individuals at the MFP. The pre- intervention questionnaire was provided the same day, prior to the intervention. The post-questionnaire was provided at the next MFP three weeks later.

Methods: A Pearson Chi Squared test was used to evaluate changes between pre- and post- questionnaire responses.

Results: There was a significant change in the number of participants who stated they received education/information on LIHEAP, and SNAP Ed ($p = 0.023$). All other results were not statistically significant.

Conclusions and Implications: Further studies should be completed to evaluate the effectiveness of education on increasing knowledge and participation in community programs.

INTRODUCTION

- Food assistance programs have increased in recent years, but that may not be enough for food insecure individuals.
- It is estimated that 10.5% of households in the U.S are experiencing food insecurity, and this number has remained the same since 2019.¹
- Research suggests that the largest competing demands directly influencing food security are the increase in health care costs as well as the geographic location of individuals.²
- To determine whether an education program would be beneficial to individuals facing food insecurity that are living in urban areas of New York State (NYS), a two-part intervention was conducted with participants of a local mobile food pantry.
- The purpose of this study was to determine if providing education on community programs to individuals facing food insecurity will increase the knowledge and participation in additional community programs (LIHEAP, SNAP Ed).

METHODS

This study was conducted at the Victory Highway Mobile Food Pantry (MFP) in Corning, NY from September 2021 to February 2022

Pre- and post- questionnaires were provided to 50 individuals at the MFP.

44 participants completed the pre- intervention questionnaire, and 45 participants completed the post- intervention questionnaire. Education was provided to all participants at the MFP.

The study tools used were created by researchers and consisted of Likert scale questions, as well as short response questions.

Data analysis was completed to determine if there was a change in knowledge and use of additional community programs.

A Pearson Chi Square test was used to determine if there was a significance in changes between responses on pre- and post- questionnaires. SPSS data analysis software was used.

$P < .05$ was considered statistically significant.

Dependent variable: Changes in pre- to post- questionnaire answers

Independent variable: Subject participation in the intervention.

RESULTS

Consent forms and questionnaires for the pre-questionnaire were provided to 48 participants ($n=48$). Participants were excluded due to not returning consent forms and not completing questionnaires completely. The final sample size for the pre-questionnaire was ($n=44$)

Consent forms and questionnaires for the post- questionnaire were provided to 50 participants ($n=50$). Participants were excluded due to not completing consent forms, and questionnaires completely. The final sample size of the participant post-questionnaire was ($n=45$)

Demographics:

County	Participants	
	Pre-questionnaire	Post-questionnaire
Chemung	1	1
Steuben	41	43
Schuyler	2	1
Other	0	0

Table 1. Information regarding participants locations was collected. 93% of pre-questionnaire participants were located in Steuben County. 2.27% of participants were located in Chemung County, and 4.5% were located in Schuyler County. 95.5% of post-questionnaire participants were located in Steuben County. 2.2% of participants were located in Chemung County, and 2.2% were located in Schuyler County.

RESULTS CONTINUED

Pre/post questionnaire knowledge change:

Figure 1.

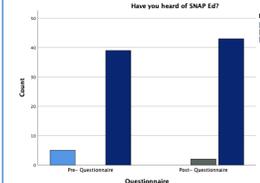


Figure 2.

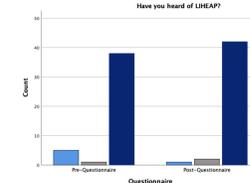


Figure 1: Bar graph comparing participant knowledge of SNAP Ed. Pre-questionnaire ($n=44$), post-questionnaire ($n=45$). Chi square test ($p = 0.28$). **Figure 2:** Bar graph comparing participants aware of LIHEAP. Pre-questionnaire ($n=44$), post-questionnaire ($n=45$). Chi square test ($p = 0.203$)

Have you ever received education/information on the services provided by these programs?

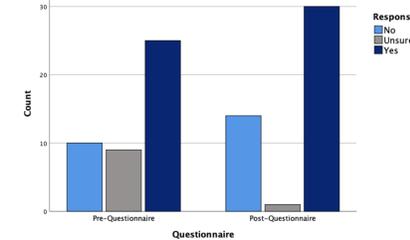


Figure 3: Bar graph comparing previous education on additional programs. Pre-questionnaire ($n=44$), post-questionnaire ($n=45$). Chi square test ($p = 0.023$)

Are you aware of the qualifications necessary to receive additional help from the programs listed above?

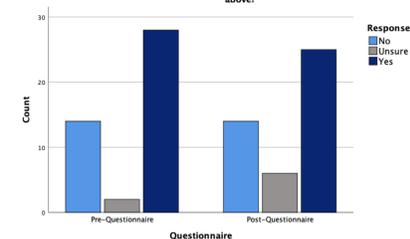


Figure 4: Bar graph comparing participant knowledge of required qualifications to receive assistance from additional programs. Pre-questionnaire ($n=44$), post-questionnaire ($n=45$). Chi square test ($p = 0.340$)

Do you know where to apply for the services provided by these programs?

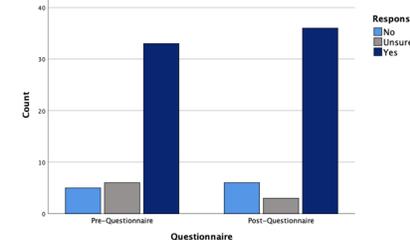


Figure 5: Bar graph comparing knowledge of where to apply for assistance from additional programs. Pre-questionnaire ($n=44$), post-questionnaire ($n=45$). Chi square test ($p = 0.546$)

Do you know where/how to access these programs?

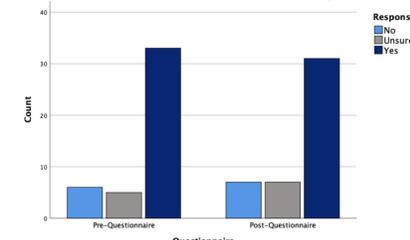


Figure 6: Bar graph comparing participant knowledge of where/how to access additional programs. Pre-questionnaire ($n=44$), post-questionnaire ($n=45$). Chi square test ($p = 0.794$)

RESULTS CONTINUED

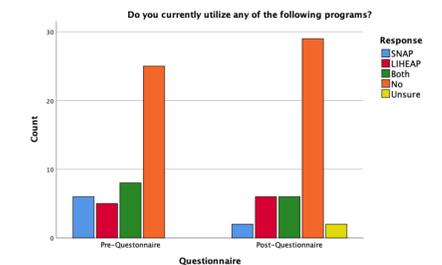


Figure 7: Bar graph comparing utilization of LIHEAP, and Snap Ed. Pre-questionnaire ($n=44$), post-questionnaire ($n=45$). Chi square test ($p = 0.324$)

DISCUSSION/CONCLUSION

- This intervention was effective at increasing the number of participants who reported receiving education/information on LIHEAP and SNAP Ed ($p = 0.023$).
- There was no statistical significance in any other data.
- A similar study performed by Rivera et al. found that education on SNAP-Ed improved food security and increased participation ($P < 0.01$; $P = 0.03$). They concluded that this study provided evidence regarding the causality of SNAP-Ed on dietary outcomes.³ The results of the study conducted were different than the findings concluded by Rivera et al.
- Strengths of this study were that participants filled out questionnaires completely. Questionnaires were disregarded if they were not completed or had any blanks. Another major strength of this study is the sample size, prequestionnaire ($n=44$), post questionnaire ($n=45$).
- Weaknesses of study were that it cannot be concluded that the same participants completed the pre- and post- questionnaire. Therefore, a knowledge change between participants cannot be concluded. There was only 3 weeks between the pre- and post-questionnaires and this provided a very limited time for participants to apply and receive approval for any of these additional programs.
- Concluding remarks: The results of this study provide an insight to current use of community programs, and the change that education may have on community program usage. However, there was limited significance in data. Further research should take into consideration a more hands on approach to providing this information as providing paper handouts with no additional information was likely a cause of the lack of significance in data. Further studies should also be conducted to determine if an increased time period between the intervention and post-questionnaire allows for more individuals to apply and begin receiving assistance from either program.

REFERENCES

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