

**Assessing Knowledge of Food Resources Among Refugees from East and Central Africa (RECA) at A
Federally Qualified Health Center: A Quality Improvement Project**

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NURS 703B: DNP project

Winter Term, 2023

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This paper is submitted in partial fulfillment of the requirements for
the Doctor of Nursing Practice Degree.

Assessing Knowledge of Food Resources Among Refugees from East and Central Africa (RECA) at A Federally Qualified Health Center.

Abstract

Multnomah Mid-County Health Center (MCHC) is one of nine Federally Qualified Health Centers (FQHCs) in Multnomah County in Oregon that provides primary care to refugees from East and Central Africa (RECA) and helps them to resettle safely. As of September 2022, MCHC had an active patient population of approximately 2,200; 300 of these patients self-identify as RECA patients. RECA patients have been found to make appointments with their providers before accessing food resources, causing a delay in accessing food resources. To better understand the baseline knowledge of RECA patients regarding how to access food resources and whether they were aware they could access those food resources on their own without making appointments with their provider, a five-question survey was developed to assess this baseline knowledge. Patients over 18 years who self-identify as RECA patients were surveyed between October 4, 2022, and November 15, 2022. Survey results revealed RECA patients did not face challenges making appointments with their providers for accessing food resources, but they were not aware they could access those food resources without making appointments with their providers. Survey results also showed that although the majority of respondents spoke English, they were not able to write in the English language. This DNP project focused on understanding whether RECA patients are aware they can access food resources on their own without making appointments with their providers. Providing patient-oriented resources would be the next step for this health center.

Keywords: food resources, East Africa, Central Africa, refugees.

Introduction

Problem Description

As the number of refugees entering the United States of America (USA) continues to increase (McMorrow et al., 2021), Federally Qualified Health Centers (FQHC) are called to action to receive and help navigate their health concerns. Refugees are defined as people forced to flee their countries due to widespread and lasting conflicts and political instability in those countries of their origin (Anderson et al., 2014). Multnomah Mid-County Health Center (MCHC) is one of nine FQHCs in Multnomah County, Oregon providing low-cost health care to residents in one of the most populous counties in the state. In 2022, MCHC had an active patient population of approximately 2,200; 300 of these patients self-identified as RECA (Gaonkar et al., 2021). All the identified RECA patients have used the healthcare system in the last year and are active patients at MCHC. RECA patients' most requested needs from providers included food resource programs, housing, transportation needs, and mental health issues (Gaonkar et al., 2021). Out of these needs, food resources programs are the most requested (Gaonkar et al., 2021). Food resource programs requested by RECA patients included the Supplemental Nutrition Assistance Program (SNAP), Special Nutrition Program for Women, Infants, and Children (WIC), and food banks (Gaonkar et al., 2021).

RECA patients could access food resource programs through MCHC by making appointments with their providers or accessing the food resource programs on their own without having to make appointments with their providers. However, making appointments with their providers for food resource programs creates a backlog of orders for Community Health Workers (CHWs) who follow through with providers' orders. It is not clear whether RECA patients have knowledge of available food resource programs or whether they know they can access those food resource programs without going through their providers. MCHC providers connect refugee patients to food resource programs upon request. Delaying access to food resource programs increase the risk of adverse health implications for

RECA patients, their families, and their communities (Mansour et al., 2020). To better address the existing backlog of food resource program referrals and fast-track RECA patients' access to food resources, as well as increase efficiency at the FQHC, there is a need to first understand the baseline knowledge of the RECA patients on available food resource programs.

Available Knowledge

Due to ongoing political instability, refugees from East and Central African countries, (RECA), are forced to flee, and many have resettled in the USA. The number of RECA refugees in the USA has nearly tripled in the last ten years, from 11, 840 in 2010 to 30, 350 in 2020 (McMorrow et al, 2021). In Oregon, the state received approximately 5, 240 in 2009 to 15, 000 RECA patients in 2020 (Gaonkar et al., 2021). Languages spoken by RECA patients include Kiswahili, Amharic, French, and English (Gaonkar et al., 2021). About 83% of RECA patients living in Multnomah County can speak English (Gaonkar et al., 2021). On arrival to the USA, and Oregon, access to basic needs such as food resources, housing, mental health, and transportation issues, becomes the priority needs for refugees (Boise et al, 2013; McMorrow et al, 2021).

On arrival to the USA, information about where to get food resource programs becomes the priority need of refugees from RECA countries. Due to a lack of information on how to locate food programs, they request information on food resource programs from their providers (Mansour et al., 2020). RECA patients in the USA risk consuming low-nutrient-dense foods because of a lack of information on where to locate nutritionally appropriate food resources (Anderson et al., 2014).

Evidence from the literature suggests that when refugees are given enough information on where to locate food resource programs, they are likely to utilize the information (Mahoney et al., 2020). McMorrow and colleagues conducted a longitudinal study of Congolese women in the Midwestern USA on available knowledge of food and food insecurity in refugee households. The Food insecurity was prevalent among households of Congolese as well as other refugees from Africa. The

study concluded that a lack of knowledge and or information about available food resources led to food insecurity in most households.

Research has shown that 43% of RECA patients have food insecurity due to their inability to access food resource programs themselves (Feinberg et al., 2021). Surveying this vulnerable population will serve as an initial step to improving access to food for RECA patients in the future.

Rationale

The conceptual framework developed by Galluzo and Pankratz (1991) is a framework that synthesizes related components and variables to help solve a given problem. The conceptual framework uses various steps and procedures to solve the problem. These steps are 1); problem identification, 2); needs assessment, 3); goals and objectives 4); Implementation, 5); educational strategies and opportunities, 6); Evaluation. The proven effectiveness of this model for small-scale QI projects made it an appropriate model for the FQHC QI project (Abramson et al., 2019).

Aim statement

The overall goal of this QI project was to survey self-identified RECA patients on their knowledge of available food resource programs offered by the MCHC. The survey results would serve as a first step to implementing interventions aimed at improving RECA patients' access to food resource programs and reducing the backlog of orders to access food resource programs.

Context

The setting of this QI project is in the urban Multnomah County in Oregon, serving RECA refugees. MCHC is led by a medical director, 11 medical doctors (MDs) two Doctors of Nursing Practice family nurse practitioners (DNP FNP), one physician assistant (PA), five registered nurses (RNs), six medical assistants (MAs), and two community health workers (CHWs). The health center provides outpatient, dental care, and pharmacy services. All providers seeing patients who requested food

resources are required to put in a referral to CHWs who then assist RECA patients to access food resource programs. MCHC has five teams that see patients. Each team is made up of two providers, an RN, and one MA. MCHC sees an average of 200 patients per week. The patient racial distribution was made up of 43.44% White, 23.19% Asian, 16.08% Black/African American, 15.2% unknown, and 0.96% American Indian (Gaonkar et al., 2021).

Interventions

The first step to developing an intervention for RECA patients to access food resource programs on their own was by first understanding their knowledge of the availability of food resource programs. A five-question survey (Appendix A) was created to help understand the knowledge base of RECA patients who are older than 18 years of age. The survey was written in English based on the 4th-5th grade reading level. The front desk staff at MCHC helped identify patients who self-identified as refugees from East and Central Africa from the Electronic Medical Records. Only English-speaking eligible patients were given the choice to complete the survey or decline it. Patients needing help with completing the survey, due to language difficulty, were assisted by the front desk staff who speaks Kiswahili fluently. If a RECA patient agreed to fill out the survey, a survey sheet and a pencil clipped to a clipboard were provided to them. RECA patients then filled out the survey anonymously and returned the completed form to the front desk. This QI project went through three phases. In phase one, a sample of the 5 -question survey and survey script were presented to the MCHC's manager, the medical director, and the operations supervisor who provided feedback on the survey. Their feedback was then incorporated into the survey before moving to the next phase. The five questions in the survey included one open-ended question that sought to explore any other priority needs of RECA patients. In phase two, three MCHC staff members, the operations supervisor, one CHW, and one front desk staff member were identified to assist the FNP student with the QI project and the questionnaire and survey information script were discussed to ensure consistency. In phase three, the FNP student checked in with the scheduler who

identified specific days RECA patients were most likely to attend the health center. On each scheduled day, eligible patients were given the survey to fill out anonymously and then returned surveys to the front desk staff who then gave completed surveys to the operations supervisor to be kept under lock and key. Additionally, the CHW was present throughout the week to provide the surveys to patients outside of scheduled provider appointments. Data collection started on October 5, 2022, and ended on November 15, 2022.

At the end of the six-week data collection period, the FNP student and the three identified staff members met and reviewed the filled-out surveys and documented findings on responses to open-ended questions. The FNP student then collected all the filled-out questionnaires and sent them to the OHSU FNP office to be kept in a locked cabinet.

Measures

The primary outcome measure for this project was to understand the level of knowledge of RECA patients on available food resource programs and whether they were aware that they could access those food resource programs on their own. Results from the survey were recorded from the number of patients who completed the survey during the six-week period. The target population for this QI project was 30 RECA patients at minimum and 45 RECA patients at maximum who were 18 years and above.

Secondary measures included the number of RECA patients identified, the number of RECA patients after the front desk staff assisted the FNP student to retrieve data from the electronic health records in September 2022, one week before the implementation of the QI project.

Analysis

Survey data were entered and analyzed in Microsoft excel. The survey results were displayed on bar and pie charts, to describe survey data on RECA patients' understanding of food resource availability and their ability to access those food resources. Responses to open-ended questions were also recorded.

Ethical Considerations

The involvement of the MCHC medical director, manager, operations manager, and the front desk staff of MCHC helped heighten ownership and create a cohesive environment where staff and patients interacted to make this QI project a success.

No patient-identifiable data and or demographic information were collected. Paper files (including paper-pencil surveys) were stored in locked filing cabinets in the operations manager's office during the recruitment and data collection period and they were moved to a restricted access office at the OHSU SoN FNP office cabinet under double lock and key after the data collection were completed. At the completion of the DNP project, surveys will be shredded. Patients were given the choice to anonymously complete or decline to complete the survey, as it was voluntary. Front desk staff explained to identified RECA patients that regardless of completing or not completing the survey, they would still receive the service for which they came to the health center.

Electronic data were password protected and secured in a laptop computer. This QI proposal was sent to the OHSU Institutional Review Board for review, and it was determined to be non-human research. It was then sent to Multnomah County Review board and was determined to be non-human research.

Results

A total of 66 surveys were completed by RECA patients and this represents approximately 22% (63/300) of the active RECA patient population at MCHC in 2022. Out of a total of 66 participants, 93.9% (Appendix C) reported making an appointment with their provider for food resources. The majority, 90.9% (Appendix D) reported that they did not face any challenges making appointments with their provider. The remaining 9.1% (Appendix D) responded "yes" and reported that the call wait time to make an appointment was long. Nearly one-third 30.3% (Appendix E) said they make appointments with their provider every year to access food resources, and another 9.1% [(Appendix E) reported they make

appointments every month to access food resources. None (0/66) reported making an appointment with their provider on weekly basis, and 60.6% [95% CI (Appendix E) reported they make an appointment for food resources at other times. Of the 66 respondents, 97.0% (Appendix F) said they were unaware they could access food resources independently without making appointments with their provider. Furthermore, 1.5% said they had additional priority needs, including where to find local food items such as local vegetables from their home country. The remaining 98.5% (Appendix G) responded “NO” to having any priority needs. Finally, 13.63% (9/66) needed help with reading and understanding the survey. In survey question two, 9.1% (6/66) of respondents indicated in writing they faced challenges with making appointments with their provider. Also in survey question five, 1.5% (1/66) answered yes and indicated in writing they have priority needs.

Discussion

This DNP project sought to understand the knowledge base of RECA patients of an FQHC on access to food resources. The majority of patients did not have challenges making appointments with their providers for food resource programs but were not aware they could access those food resources on their own without making appointments with their providers. The results of this project were in line with the conceptual framework, as the problems of RECA patients were identified, meeting the goal of this QI project. The implementation of this QI project provided room for educational strategies and opportunities to be put in place for RECA patients at MCHC such as creating a QR code that gives patients audio-visual access on their phones and directing them to various food resource programs.

Interpretation

MCHC receives all RECA patients entering the state of Oregon and has the highest population of RECA patients in the state of Oregon making it a suitable site for this project. As a result, findings from this site could be used by the other eight FQHCs to help improve the services provided to RECA patients. After analyzing the survey results, the majority of RECA patients were not aware that they could access

food resources on their own, meaning that RECA patients do not have knowledge about available food resource programs offered by MCHC. Even though 83% of RECA patients can speak English (Gonker et al., 2021), it could mean they are not able to read and understand written language to follow instructions and directions provided by the providers to be able to access food resource programs on their own. These possibilities are hard to predict as there could be multiple factors causing RECA patients to make multiple appointments for food resource programs including technology use, internet, and internet equipment availability, and an inability to place and follow through phone calls to food resource centers. Only a few respondents said they had challenges making appointments with their providers which might be due to high call volumes or calls made during break times or staff meetings.

All RECA patients who completed the surveys stated they make appointments with their provider yearly, monthly, or at other times. A vast majority of the respondents said they were not aware they could access food resource programs on their own which could be due to a lack of adequate information or an inability to understand the information provided by their healthcare providers. Only 1.5% reported they had additional priority needs, and 13.63% needed help completing the survey. Even though the majority did not ask for help completing the surveys, they still might not have understood the survey question or genuinely did not have priority needs to report.

Limitations

During the data collection period, we learned that most RECA patients access food resources such as SNAP and TANF and these are renewed every six months. Adding six months to survey question three could have generated a more specific response than the “other” option. The survey did not explore what languages RECA patients spoke and their English reading level. The survey did not explore whether RECA patients have the means to access food resource sites and information on their own such as the ability to use technology, internet access, and ability to follow instructions. Most instructions were provided by MCHC in English, and this might compromise RECA patients’ ability to read and

understand. The survey did not include providers' perspectives on access to food resources, how offered, and how accurately providers offer information to RECA patients. The duration of the survey (six weeks) was short, as many more patients could have completed the surveys.

Recommendations

1. English reading and comprehension levels of RECA patients should be assessed by future QI projects.
2. MCHC and future QI projects should explore RECA patients' ability to use technology, internet access, and ability to follow instructions.
3. MCHC should create an audio-visual program in the form of a QR code that has a compilation of available food resources offered at MCHC, which patients scan with their mobile phones at their convenience. Viewing and listening at the same time could give patients direction to access food resource programs on their own.
4. In future surveys as a follow-up to this QI project, focus group discussions on accessing food resource programs could help improve and validate patient responses.

Conclusion

Implementation of recommendations from this QI project will help make access to food resources a bit easier for RECA patients once they arrive in Oregon and are established at MCHC. Future QI surveys may determine the level of English reading and comprehension of RECA patients to enhance the continuity of this QI project as providers would know the level of instruction and content to be provided when offering RECA patients directions to food resources. Future strategies from this survey could benefit all RECA patients, refugees, and all patients of MCHC as this QI project was focused on developing tools for assessing RECA patients and not using a previously developed tool.

Funding

There was no funding associated with this QI project.

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Appendix A.
Survey Questionnaire for Assessing Knowledge of RECA Patients on Available Food Resources

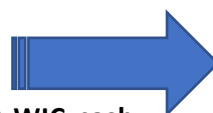
We appreciate you taking this survey. Your participation in this survey will help us to understand your knowledge of available food resources and what barriers you face in accessing food resources. This survey will take you about 5-10 minutes to complete. This survey is a one-time survey.

No personal information such as your name, phone number, social security number (SSN), or address will be collected in the survey. The survey is confidential.

Participation is completely voluntary, and you may quit the survey at any time.

If you have any questions or concerns about this survey, you may contact me at iddrisu@ohsu.edu

Survey



1. Do you make appointments with your provider for food resources (SNAP, WIC, cash assistance)?

Yes No

2. Have you faced difficulties making appointments with your provider for food resources?

Yes No

If yes, what are the challenges?

.....
.....
.....

3. How often do you make appointments to obtain food resources (SNAP, WIC, Cash assistance)?

Yearly Monthly. Weekly other

4. Are you aware you can access those food resources on your own without making an appointment with your health care provider?

Yes No

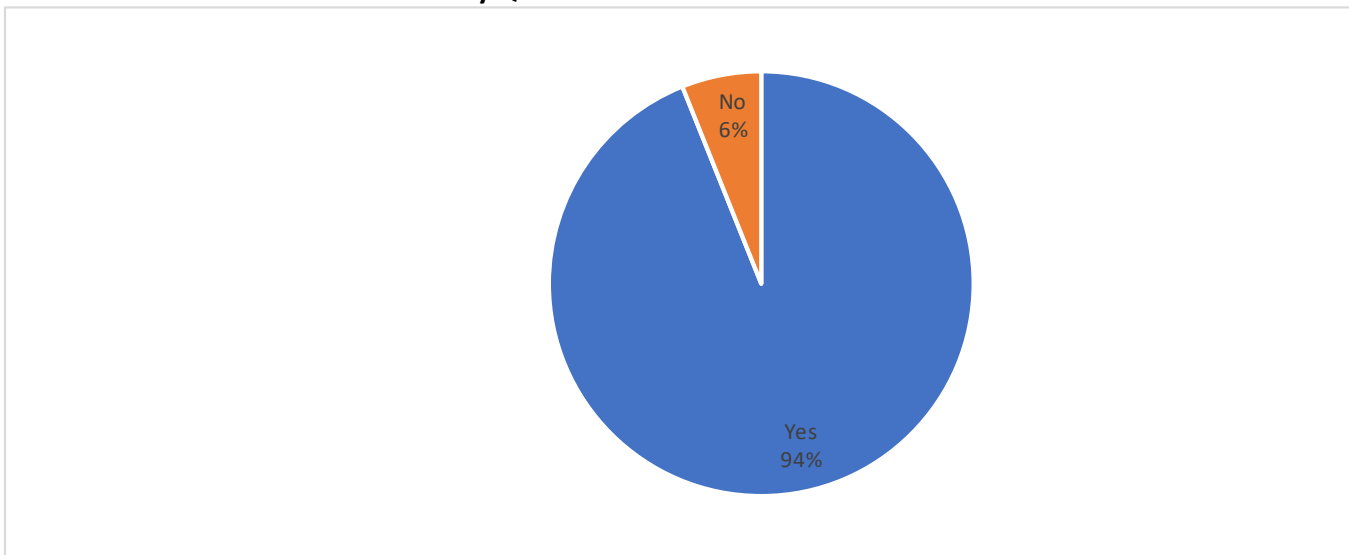
5. What additional needs do you have? Please list them here.....

Appendix B
Summary of Survey Findings

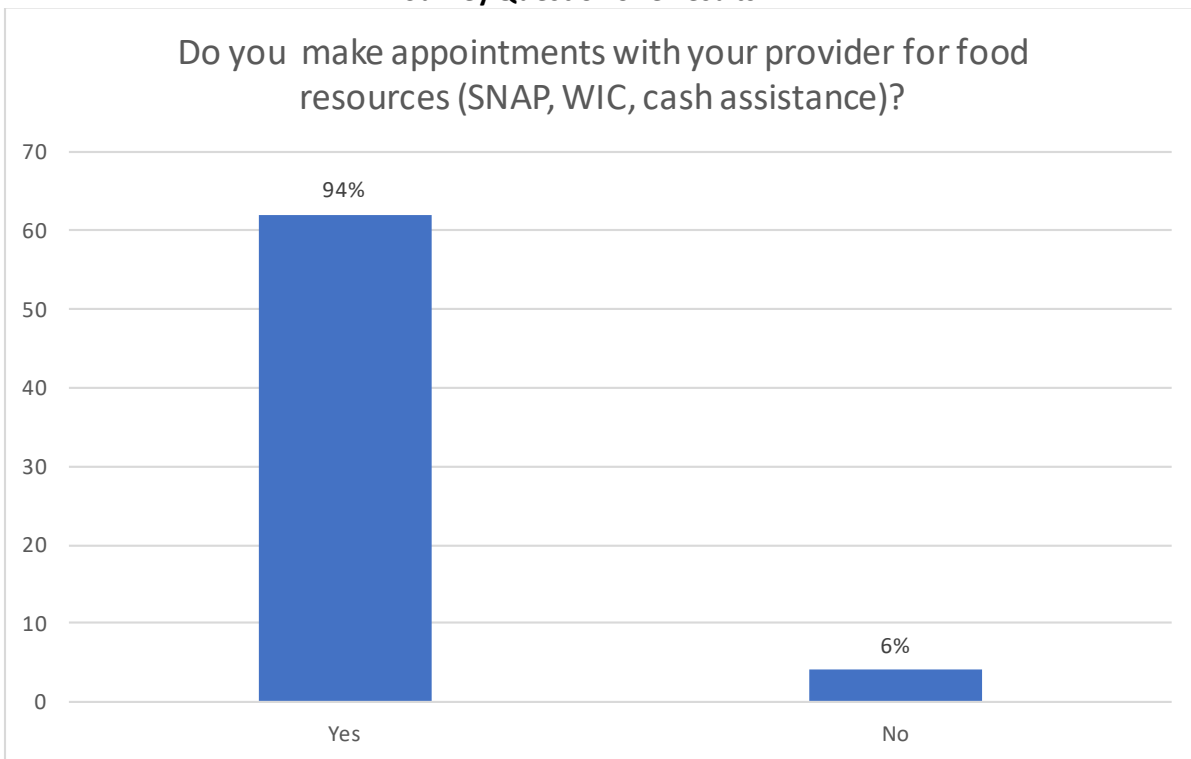
N=66	Yes	% [95% Confidence Interval]	No	% [95% Confidence Interval]
Q1	62	93.9% [95% CI (88.2%, 99.7%)]	4	6.1% [95% CI (0.3%, 11.8%)]
Q2	6	9.1% [95% CI (2.2%, 16.0%)]	60	90.9% [95% CI (84.0%, 97.8%)]
Q4	2	3.0% [95% CI(0%, 7.2%)]	64	97.0% [95% CI(92.8%, 100%)]
Q5	1	1.5% [95% CI (0.0%, 4.5%)]	65	98.5% [95% CI (95.5%, 100%)]
Q3				
Yearly	20	30.3% [95% (19.2%, 41.4%)]		
Monthly	60	9.1% [95% CI (2.2%, 16.0%)]		
Weekly	0			
Other	40	60.6% [95% CI (48.8%, 72.4%)]		

CI=Confidence interval.

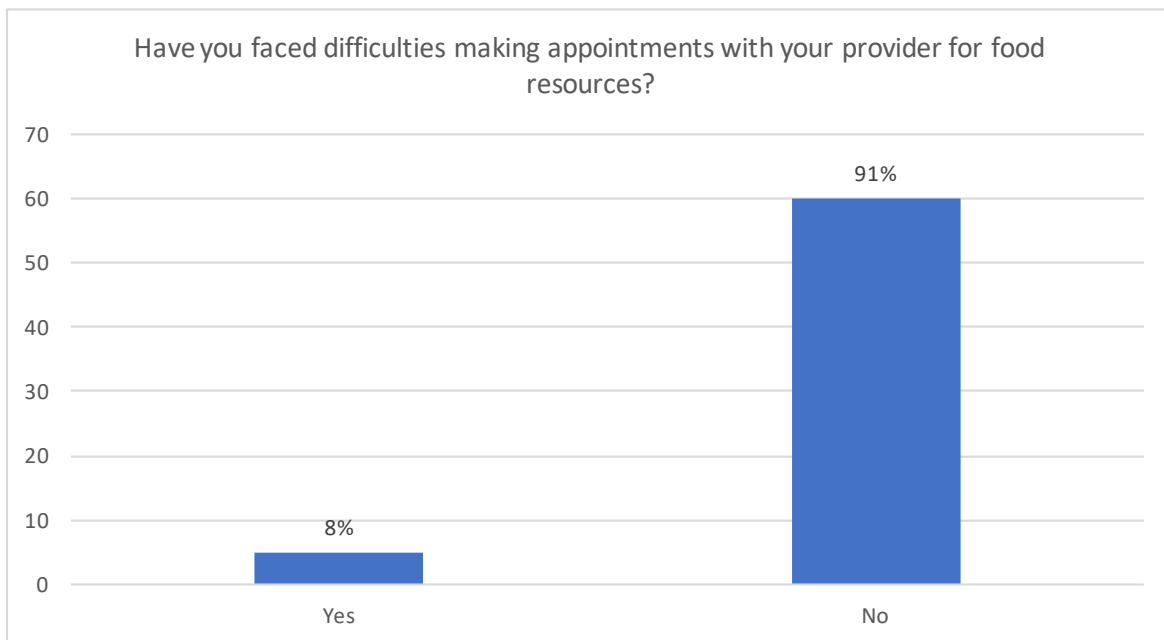
**Appendix C1
Survey Question one Results**



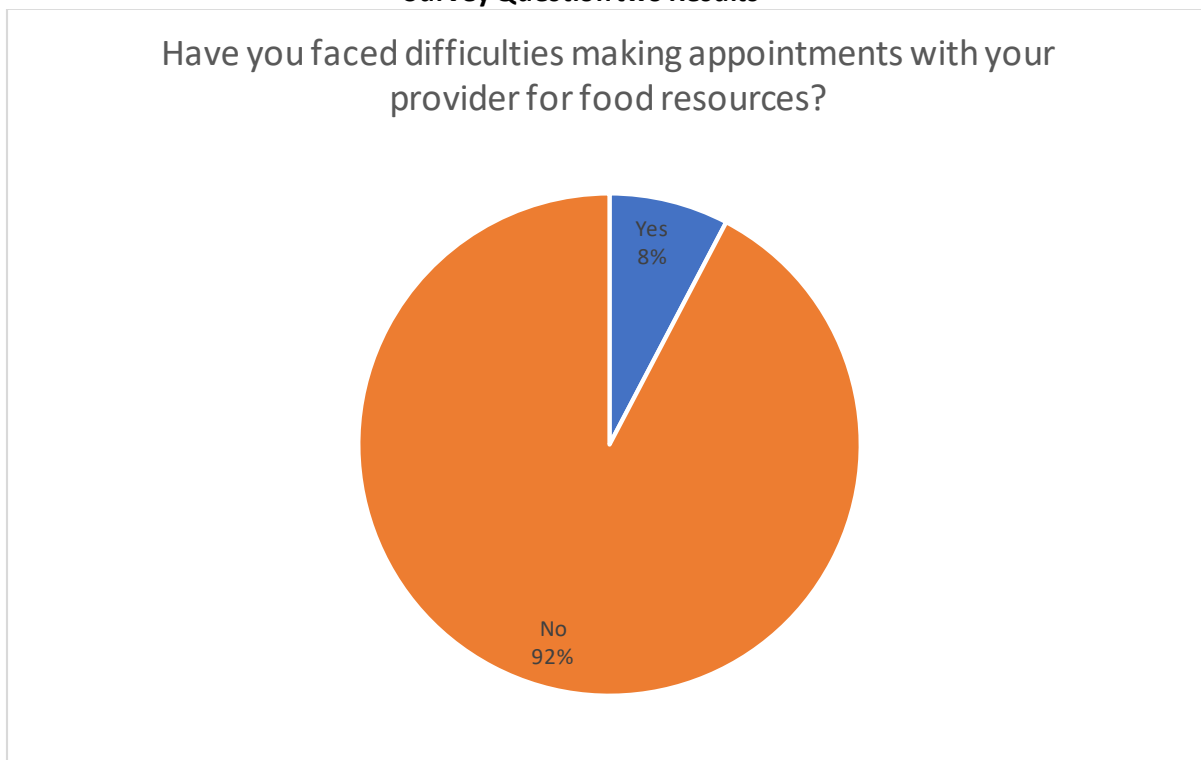
**Appendix C2
Survey Question one Results**



Appendix D1
Survey Question two Results

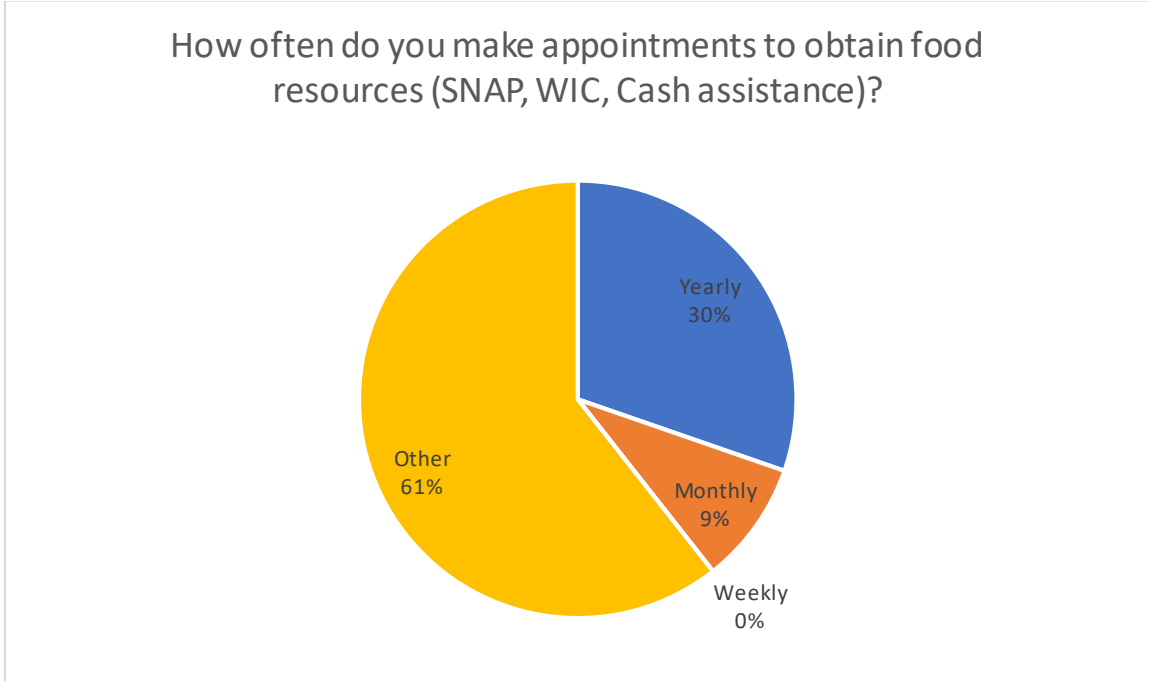


Appendix D2
Survey Question two Results

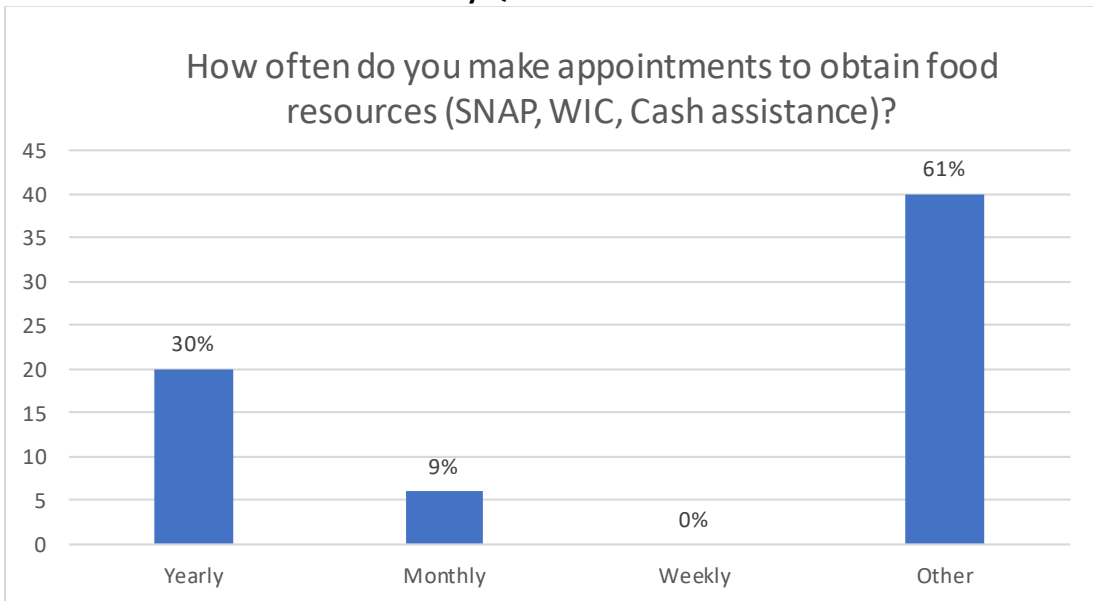


Appendix E1

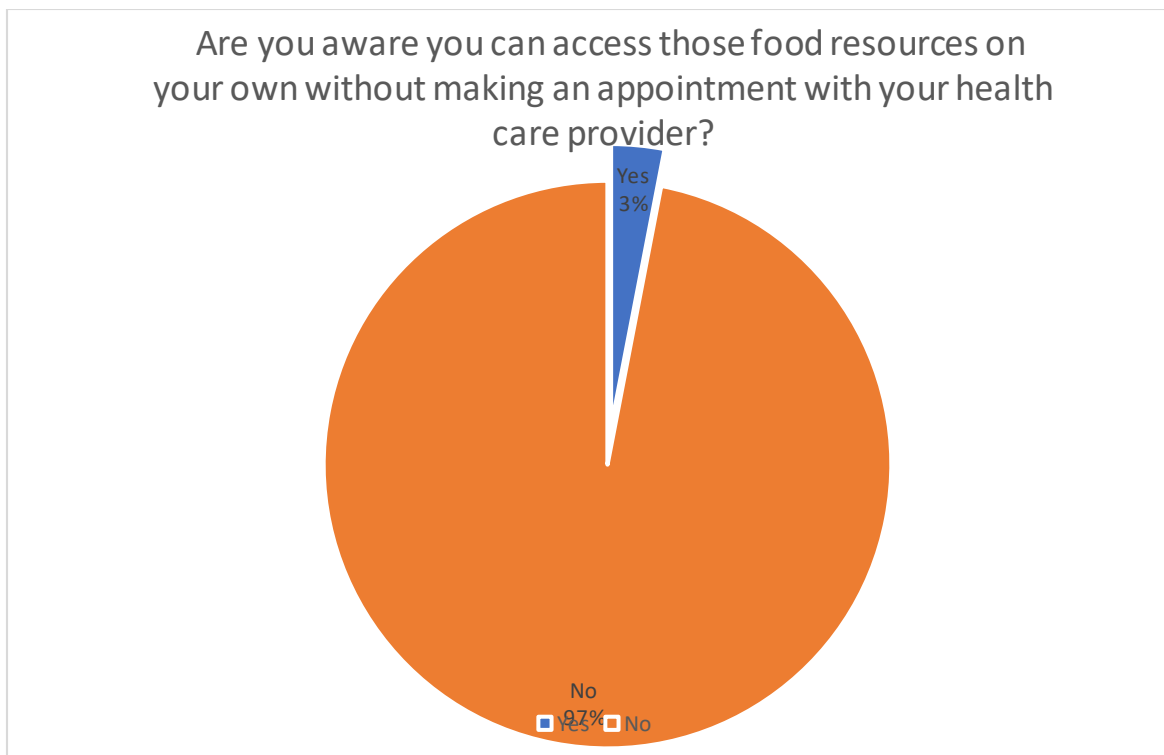
Survey Question three Results



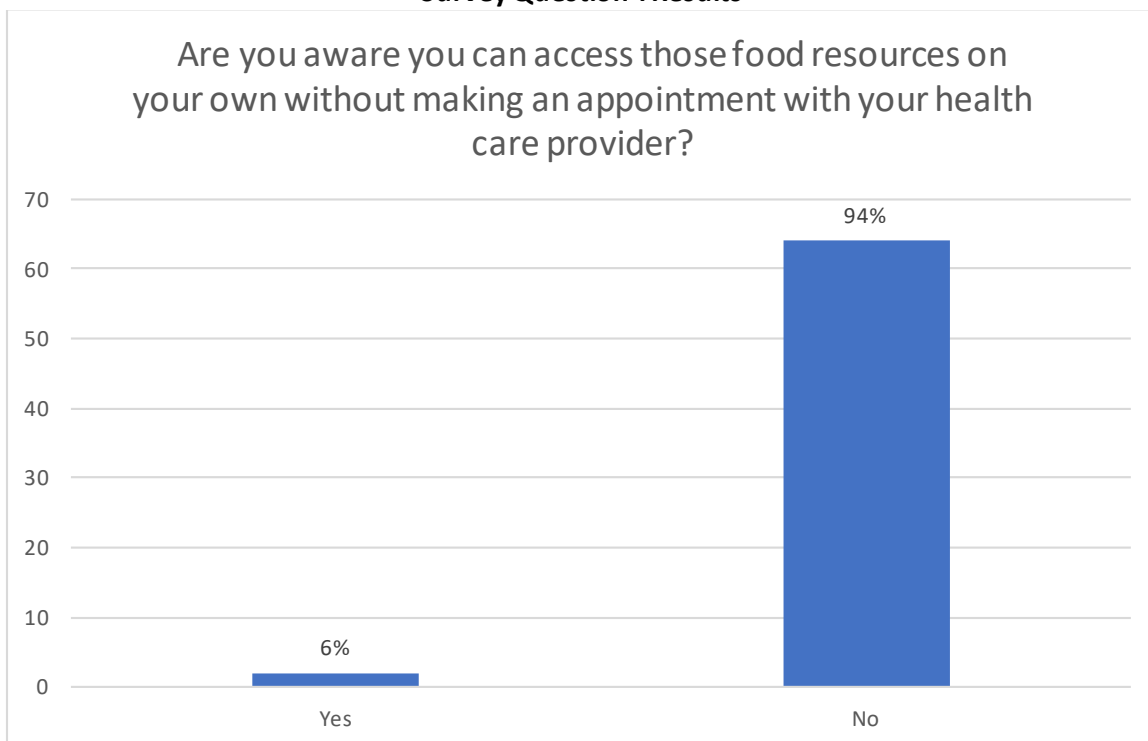
**Appendix E2
Survey Question three Results**



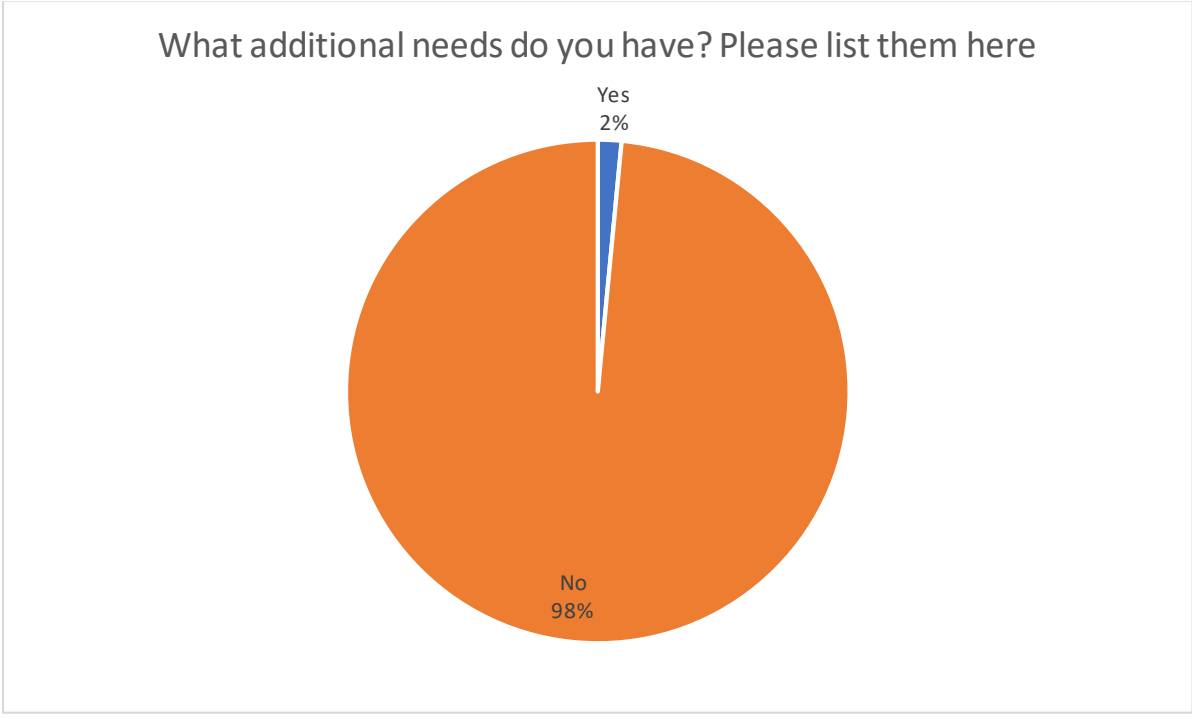
**Appendix F1
Survey Question four Results**



Appendix F2
Survey Question 4 Results



**Appendix G1
Survey Question five Results**



**Appendix G2
Survey Question five Results.**

