

Farmers' markets' uptake of food assistance programmes in East Tennessee, USA

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Abstract

Objective: Limited acceptance of government food assistance programmes such as the US Department of Agriculture's (USDA) Supplemental Nutrition Assistance Program (SNAP) is a barrier that produces unequal access to market products for SNAP beneficiaries. There is a dearth of published evidence to explain the limited SNAP acceptance at farmers' markets. The current project aimed to fill this gap; to identify and describe the barriers to markets' acceptance of SNAP.

Design: Cross-sectional, semi-structured interviews were conducted.

Setting: All interviews were conducted via telephone.

Subjects: Twelve East Tennessee area market managers, vendors and other key stakeholders.

Results: Multiple barriers exist for SNAP implementation at markets including administrative and time limitations, prejudice from market vendors against SNAP beneficiaries, and resistance to invasive and burdensome requirements of the USDA SNAP application required for farmers' markets.

Conclusions: SNAP acceptance at farmers' markets is a complex issue, especially for small, rural markets. If farmers' markets are to serve as sustainable resources to increase food access, these issues must be addressed so that SNAP can be accepted. Successful implementation of SNAP at rural markets requires increased administrative support and vendor education about SNAP and its beneficiaries. A revised USDA SNAP application process for farmers' markets should also be considered.

Keywords
Food access
Farmers' markets
Low-income

Formerly known as 'food stamps', the Supplemental Nutrition Assistance Program (SNAP) provides nutrition assistance to individuals and families with a gross income $\leq 130\%$ of the Federal Poverty Line⁽¹⁾. Among SNAP recipients, fruit and vegetable consumption is well below levels recommended in federal dietary guidelines⁽²⁾. In recent years, policy goals of the US Department of Agriculture (USDA) include improving the diet of SNAP participants, with a concentration on increasing fruit and vegetable consumption⁽²⁾. However, many SNAP recipients live in rural areas where access to grocery stores and healthy foods is limited⁽³⁾.

Acceptance of SNAP at farmers' markets located in rural areas could be one solution for increasing accessibility of fruits and vegetables among SNAP beneficiaries. Past research shows that the use of SNAP at farmers' markets leads to increases in fruit and vegetable consumption by SNAP recipients⁽⁴⁾. Since its initiation in 2009, Michigan's Fair Food Network SNAP programme reports more than 3 million pounds (1.36×10^6 kg) of fresh fruits and vegetables were purchased at local farmers' markets using SNAP. In addition, 93% of SNAP users at Michigan farmers'

markets report eating more fruits and vegetables since the programme began⁽⁵⁾. Residents of Danbury, Connecticut are seeing a similar uptake in SNAP fruit and vegetable purchases at local farmers' markets. In 2010, the Danbury Farmers' Market launched its Better Health through Better Food Project encouraging the use of SNAP at the market. Since the initiation of this project, SNAP redemption at the Danbury Farmers' Market has increased by 262%⁽⁶⁾.

SNAP at farmers' markets can be implemented in two distinct ways: market-wide or direct vendor. In the market-wide model, the market as a whole is authorized to process SNAP transactions and all vendors selling SNAP-approved goods at that market must participate in the programme. In this model, SNAP customers visit a centralized booth where their Electronic Benefit Transfer (EBT) card is processed for a monetary amount of the customer's choosing. In return, the SNAP customer is given custom scrip in the form of wooden tokens or paper coupons that are designed for farmers' market use. Vendors redeem scrip at the market's administration in return for a receipt and are reimbursed via cash or cheque.

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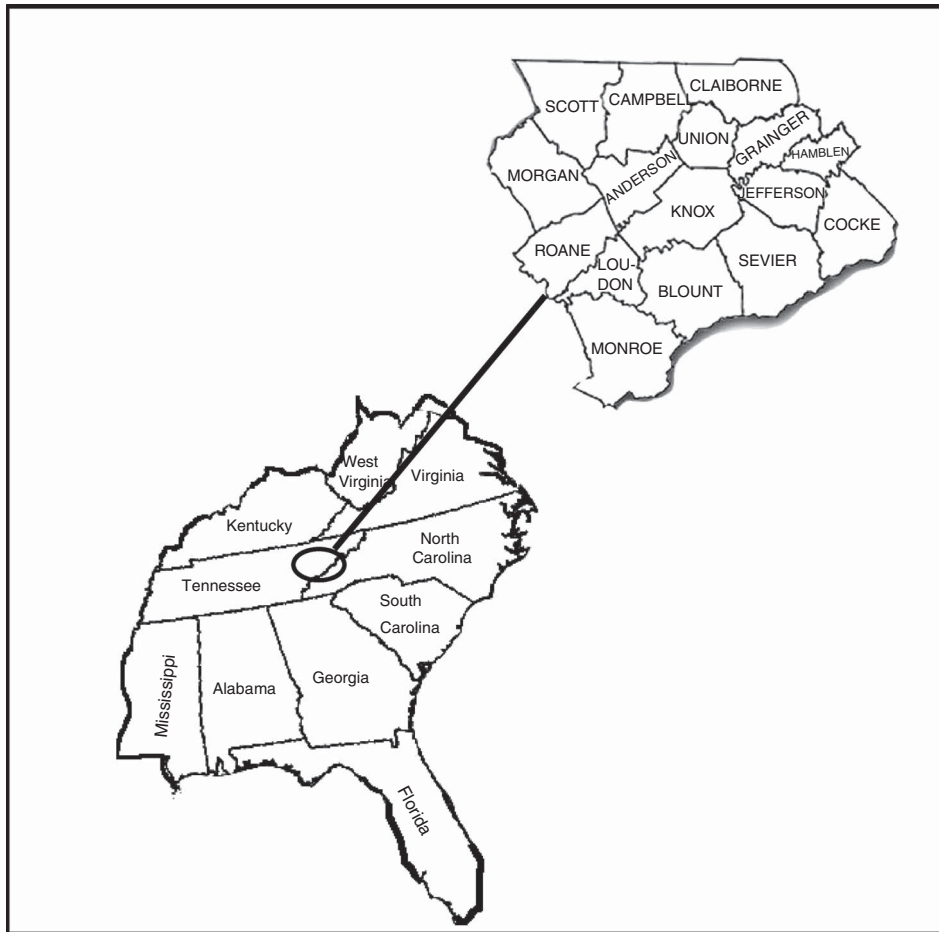


Fig. 1 Sixteen-county region of rural East Tennessee

In the market-wide model, an official application must be filed with the USDA Food and Nutrition Service (FNS) on behalf of the market⁽⁷⁾. This application process requires an individual be named as the responsible party for all SNAP transactions made at the market. This process requires the named individual to provide his/her social security number and have all SNAP equipment linked to his/her personal identification⁽⁷⁾.

In 2013, the USDA formed a partnership with the National Association of Farmers' Market Nutrition Program to create MarketLink, a programme designed to assist farmers' markets with accepting SNAP. Under MarketLink, incentives are provided to farmers' markets who implement a market-wide SNAP programme including complimentary equipment and partnerships with government-authorized merchant service providers⁽⁸⁾. While the number of SNAP-authorized farmers' markets has increased with this incentive programme, a majority of SNAP-authorized markets are concentrated along the east and west coasts of the USA with a significant shortage in the rural Southeast^(9,10). The lack of SNAP-authorized farmers' markets in rural Southeastern counties is problematic because SNAP participation in these areas is among the highest in the nation⁽¹¹⁾. In the sixteen-

county region of rural East Tennessee (Fig. 1), 22.6% of the population receives SNAP while the number of SNAP-authorized farmers' markets remains low^(12,13).

Only three of the twenty-eight farmers' markets operating in East Tennessee (10.7%) currently accept SNAP market-wide. On average, Knox County has one of the lowest percentages (14%) of SNAP recipients in the Southeast, yet two of the three SNAP-authorized farmers' markets in this region are located in urban areas of Knox County⁽¹⁴⁾. Several smaller, more rural counties including Cocke and Scott have SNAP populations exceeding 30% with no SNAP-authorized farmers' markets^(13,14). The lack of SNAP acceptance at these markets presents a significant barrier for individuals residing in low-income households to purchase fresh, local products.

When implementing a successful market-wide SNAP programme, it is imperative to receive support and buy-in from market administrators and community stakeholders⁽⁶⁾. However, farmers' markets in East Tennessee function under their own individual set of rules, regulations and guidelines with no formal consensus or procedure for how a market will function or who will oversee the market's day-to-day operations. In this region, farmers' markets are

administered by a variety of institutions ranging from non-profit organizations to universities to cities to boards of directors. The administrative framework of farmers' markets has the potential to significantly influence how and if a market is capable of applying for and successfully implementing a market-wide SNAP programme.

If a market-wide SNAP programme is not in place at a farmers' market, vendors may become SNAP-authorized directly. In a direct vendor model, vendors who sell SNAP-approved products can apply directly to accept SNAP at their individual vendor stalls through the USDA FNS. Vendors may then conduct SNAP transactions directly with the customer rather than relying on the market for payment processing and reimbursement⁽⁷⁾. It is possible that there are individual vendors that accept SNAP via the direct vendor model at rural East Tennessee markets; however, that information is currently unknown and not documented in the USDA's publicly available records of SNAP-authorized farmers' markets.

Acceptance of SNAP at farmers' markets in this region could be a sustainable public health solution to increase access to fruits and vegetables in this high-risk region⁽⁴⁻⁶⁾. However, to date, there is no published explanation for the limited market-wide SNAP acceptance at East Tennessee farmers' markets. The present study investigated why so few markets in this region accept SNAP from the perspective of local area market managers and other key stakeholders and answered the following research questions:

1. Why are East Tennessee farmers' markets not currently accepting SNAP benefits?
2. What challenges do local markets face when applying to become SNAP-authorized?

Methods

Participants

The principal investigator of the present study (J.R.) is an area farmer. Using her contacts with local farmers' markets, a convenience sample of participants was recruited via sign-up sheets distributed at both state and regional farmers' market assemblies to participate in the current cross-sectional qualitative study.

To participate, individuals had to be involved in the operation and execution of farmers' markets in the East Tennessee region. There are three SNAP-authorized markets in the defined sixteen-county area of the study. Only two of the three SNAP-authorized market managers could be reached for comment; therefore, the study was expanded to include one additional participant from a secondary county (Rutherford) with a SNAP-authorized market. Although Rutherford County is not part of East Tennessee, the participant had affiliations with and expertise in SNAP at farmers' markets in East Tennessee. Study participation was voluntary and participants did not receive any reimbursement or incentives for participation.

Each participant was assigned a unique identification number to maintain confidentiality.

Measures

Participants completed one-time semi-structured interviews. A semi-structured interview guide (Table 1) was developed to inform answers to the two research questions. Demographic data included market affiliation, primary market responsibilities and previous experience with SNAP. Eleven open-ended questions were included addressing SNAP implementation at markets and potential barriers with SNAP implementation. After all interviews were complete, audio files were transcribed. Interviews ranged from 30 to 60 min in length and data collection concluded when thematic saturation was achieved⁽¹⁵⁾. The first author conducted all interviews via telephone in March 2015.

Analysis

The first author reviewed the interview recordings and transcribed them verbatim. The transcriptions were then entered into NVivo 10 (QSR International, Burlington, MA, USA) for data management and analysis. Using conventional content analysis⁽¹⁶⁾, data analysis began with the first author reading all data repeatedly to achieve immersion. A team of two coders (J.R. and a faculty advisor, J.M.J.) developed a draft codebook guided by the study's research questions entitled *Exploring the use of SNAP benefits and Challenges with SNAP program implementation*. Preliminary coding was conducted by the first author and then all coding was reviewed and double-coded by the second author. Analysis was done both deductively, looking for codes identified prior to data collection, and inductively, allowing new codes to emerge with the data⁽¹⁵⁾. Coding was compared and discussed between the authors until agreement was reached on all transcripts.

The project was approved by the University of Tennessee Institutional Review Board (protocol #UTK IRB-14-02035-XP).

Results

Participants

Twelve farmers' market representatives (FMR) were interviewed including nine farmers' market managers from eight counties, one county health department representative and two state farmers' market representatives. Market managers from Anderson, Cocke, Hamblen, Jefferson, Knox, Roane, Rutherford and Union counties were included. Representatives from the remaining eight East Tennessee counties were not able to be reached after multiple contact attempts. Of the nine market managers interviewed, three represented SNAP-authorized farmers' markets while the remaining six represented markets where SNAP was not currently accepted.

Table 1 Semi-structured interview guide

1. Which farmers' market(s) are you representing?
2. Tell me about your background and how you came to fill your current position.
3. What are your primary responsibilities at the market?
4. What can you tell me about the relationship of SNAP to farmers' markets?

Q1. Does your market currently accept SNAP benefits?

Theme 1: Exploring the use of SNAP benefits

(If response is YES to Q1)

1. How long has the SNAP benefit programme been offered at your market?
 - a. How is it going?
2. What are the reasons your market decided to implement a SNAP programme?
3. How do you promote that SNAP benefits are accepted by your market?
4. What aspects of the current SNAP benefit programme would you like to see revised?
5. If a rural community in another Appalachian region was considering accepting SNAP at their market, what advice would you have for them?

(If response is NO to Q1)

1. Why are SNAP benefits not accepted at your market?
2. Has your market ever accepted SNAP?
 - a. *If yes: Why was the programme eliminated?*
3. Please tell me about any steps that have been taken by your market to implement a SNAP benefit programme.

Theme 2: Challenges and successes with SNAP programme implementation

Some farmers' markets have experienced great successes and others great challenges when implementing the SNAP programme. I'm interested in hearing about your experiences.

(If response is YES to Q1)

1. Tell me a story about some of the biggest successes with the SNAP programme at your market.
2. What were/are the main challenges involved in SNAP program implementation?
 - a. *Potential probes based on initial response:* You mention (administrative, time, equipment, expense) challenges, please tell me more about that.
3. It has been suggested that there is resistance to SNAP implementation because SNAP beneficiaries are not the target demographic of farmers' markets. Tell me your thoughts about that.
 - a. Describe the vendors' reactions to the implementation of SNAP at your market.
 - b. Tell me about any additional unanticipated reactions to the SNAP programme implementation.

(If response is NO to Q1)

1. Based on your experience, what are your market's main barriers to implementing a SNAP programme?
 - a. *Potential probes based on initial response:* You mention anticipated (administrative, time, equipment, expense) challenges, please tell me more about that.
2. It has been suggested that there is resistance to SNAP implementation because SNAP beneficiaries are not the target demographic of farmers' markets. Tell me your thoughts about that.

Wrap up

Is there anything additional you would like to share with me?

SNAP, Supplemental Nutrition Assistance Program.

Theme 1: Exploring the use of SNAP benefits

The first theme, 'Exploring the use of SNAP benefits', captured to what degree a SNAP programme has been implemented at farmers' markets. Two deductive codes were seen in this theme: market implementation and government support. One inductive code emerged with the data: future progress of SNAP implementation.

Market implementation

When considering the various institutions that administer markets in this region, participants noted that markets run

by boards of directors are less likely to implement a market-wide SNAP programme:

'... if you have a rotating board and that's who's running it or if you just don't have a permanent or semi-permanent director, you can't do it. So, that's a big challenge and barrier for most markets.' (FMR6)

'... they [the board of directors] just seem really unwilling or fearful of even trying to hire someone to be a separate staff person.' (FMR4)

In addition, managers from markets where one or more vendor accepts SNAP via a direct vendor model were reluctant to implement SNAP market-wide:

'You know, there are some [vendors] who use their own debit and credit card readers. They [vendors] have square and they can even get approved for SNAP on their own if they want. ... if we drag our feet long enough, we may see our bigger vendors just do it without us.' (FMR4)

'Our biggest vendor accepts them [SNAP] already ... So, with that being said, that kind of eases our responsibility [for a market-wide SNAP program].' (FMR5)

As more vendors apply to become SNAP-authorized directly, market responsibility to implement a market-wide SNAP programme may be reduced.

Government support

The incentives provided under MarketLink were mentioned by participants as potential tools to encourage markets to implement a SNAP programme:

'The Federal government has offered money, they've offered supplies and equipment. They've offered the wireless printer, they've offered a free iPhone with [square] so you get credit and debit and SNAP all in one stop. And they've offered that for free to anyone who wants to sign up.' (FMR3)

However, because many people already own smartphones and personal credit card readers, these incentives seem to fail to encourage additional market-wide SNAP implementation:

'And, people just don't want to hassle with it [SNAP benefits], you know. The wireless printer and the iPhone and the card reader are not as much as an incentive as they might have been 5 years ago because so many people are already using the square space thing.' (FMR3)

Future progress of SNAP implementation

Representatives from all three SNAP-authorized markets reported that they applied to take part in a 'double-up' programme sponsored by the AARP Foundation (formerly the American Association of Retired Persons) beginning in autumn 2015. This programme allows SNAP dollars to be 'doubled up' to a maximum of \$US 10.00, meaning if a SNAP recipient redeems \$US 10.00 at a local farmers' market, the market would then match that amount, giving the participant a total of \$US 20.00 to spend at the market⁽¹⁷⁾:

'[Two local markets] have both applied to be part of a very large grant. It's a Federal grant they are applying for to get the double up SNAP program

here in Knox County. And so the double up program would be \$10. You use \$10 you get \$10 in SNAP money at those two markets ...' (FMR3)

Interview participants were hopeful that a 'double-up' programme would prove successful in increasing the SNAP customer base in East Tennessee:

'A doubling program will increase usage and increase income to our farmers and also allow for something to talk about, free PR. And there will be some amount of funds that will go toward outreach and promotion of the program. That would be great. Anything in that sort of vein that would help you promote all of the markets that accept SNAP would be very helpful.' (FMR6)

'... there would be a lot of advertising that would go into that so that would hopefully increase SNAP usage and that would start this fall [2015] if it happens.' (FMR3)

Theme 2: Challenges and successes with SNAP programme implementation

The second theme, 'Challenges with SNAP programme implementation', was designed to analyse the barriers experienced by markets when implementing a SNAP programme. Three deductive codes were developed for this theme: staffing challenges; financial constraints; and time constraints. Four inductive codes emerged with the data: government policy and requirements; vendor resistance to SNAP; marketing challenges; and gaps in SNAP programme knowledge.

Staffing challenges

Staffing for market administration and management at small, rural farmers' markets is often limited. In East Tennessee, participants mentioned that a single person may be responsible for a range of duties including vendor coordination, collecting vendor fees and handling market advertising:

'The main reason is we don't have someone to manage the SNAP program. We don't have a manager/vendor type person that wants to be responsible for that money.' (FMR5)

In addition, at many East Tennessee markets, the on-site manager is also a vendor, which then becomes his/her primary role – to sell his/her own goods. The lack of administrative staff was addressed by study participants as a significant barrier to SNAP implementation:

'One of the issues that we have is that we don't have a dedicated staff person on-site at every market, every day except for the market manager who is a vendor. And that means they are busy and they

really don't have time to stand there and scan everybody's card.' (FMR4)

Financial constraints

Farmers' markets incur operating expenses and small, rural markets operate with extremely limited budgets. Participants in the present study reported receiving minimal stipends from their city or county governments and rely primarily on weekly vendor booth fees to supplement operating expenses. Without adequate external funding to implement and sustain a SNAP programme, rural markets may not have the capability to maintain SNAP equipment or afford EBT credit card transaction fees:

'It's also a money thing. ... there are transaction fees. And, so, even though the equipment is free, you still have to pay for all the transaction fees.' (FMR3)

'... we, as an organization, don't make any money because it's not our sales or our product. It's just a service. There's a cost associated with it and now that we have to use this wireless machine, which is a minimum of like \$60 a month ... to be able to accept the program at all.' (FMR6)

Time constraints

In order to process SNAP, a dedicated person is required on-site at each market to process and reimburse vendors all SNAP transactions. These administrative tasks take a lot of time:

'I've been told that anecdotally it adds 8–10 hours a week on just the manager's part so that's going to be a really big time investment for the market.' (FMR3)

'It takes a lot of time to do the bookkeeping on that, you know? But then it also takes a lot of time to collect the tokens at the end of the market. For me, I would say it's like 1–3 more hours a week.' (FMR6)

Time was a barrier to SNAP implementation at rural markets with limited or volunteer staff members.

Government policy and requirements

The USDA FNS SNAP application process can present a challenge for small, rural East Tennessee markets as the stability and administration of these markets vary from county to county. In East Tennessee, market managers may rotate from year to year or from week to week, making locating a designated person to complete the required USDA FNS paperwork difficult:

'... there has to be a separate account where the SNAP money goes in to and that market manager is tied to that account and they have to have a Social Security number on that account. Where they would be responsible to the Federal Government, for, if

something went wrong with the SNAP money, the government would come after that specific manager. So, one person is responsible for the whole thing. And a lot of market managers have shied away from it because they don't want to be the one individual tied to that account. I know [local market] has expressed that they don't want to get involved because of that.' (FMR3)

'The manager or someone with the market has to put their name, their personal name down. There can't be some employee identification number, nothing like that. It has to be an individual.' (FMR12)

If a market finds a designated person willing to apply on behalf of the market, once that responsible party leaves the market, a new application must be filed with FNS in order for the market to continue processing SNAP transactions:

'... they [market managers] usually tell me the reason that they don't [accept EBT] is you have to have a person with their social security number that goes on the application so with our market, it is assigned to me personally. We have a market that has a permanent director that is a paid employee and the majority of farmers' markets don't have that. And that person is supposed to be on-site or around. Also, you know it's your own personal liability for the program. If I leave, our market has to reapply.' (FMR6)

Vendor resistance to SNAP

Vendors were regarded by FMR as the backbone of rural, East Tennessee farmers' markets. In rural East Tennessee, FMR from markets where SNAP was not accepted reported that market vendors held prejudiced attitudes about SNAP customers:

'They [vendors] said we don't like welfare. We don't think that people should get free food when we're out here busting our butts, you know, working hard to get them free food.' (FMR7)

'Sometimes there's some prejudices with the vendors. That they don't really want to bring SNAP users because they have a misconception on who those users are. They think that they [SNAP users] are, you know, ... I wouldn't say scum of the earth, but, they think that they're unsavory people maybe.' (FMR3)

'They, I think they [vendors] are afraid that this will look like a lower class of person that would come and, turn off the current customer at the market.' (FMR2)

'They [vendors] don't necessarily want to attract the kind of people that they believe would have access to SNAP.' (FMR3)

'A lot of people think that people that go to the farmers' market are the health conscious, the young adults who are just starting out who are health conscious and want to buy fresh homegrown products. And that the people who would use SNAP probably would rather go to a convenient store and buy potato chips instead of fresh corn and beans.' (FMR8)

Because of the crucial role that vendors play in sustaining rural markets in this region, FMR indicated that implementation of a market-wide SNAP programme would be unlikely without vendor support:

'I have approached the vendors with the idea and the response that I got was that they didn't think it would be a good work or a good fit for them because it took so long to get paid from it.' (FMR8)

'... the vendors voted not to have it. Because we tried to bring it [SNAP] to it [the market] when there was going to be the free equipment, which is still in effect.' (FMR2)

Among SNAP-authorized market managers, despite some initial resistance to the programme, vendors were currently in favour of the programme:

'I know there are other farmers' markets that have had issue. They want to take it ... and then the other vendors think it's an entitlement program and they're a bunch of freeloaders. We have not had that problem.' (FMR6)

'We had people say, "Oh we are going to become the food stamp market. It's gonna be a big hassle for us. We're gonna have to manage these extra tokens and discern between cash tokens and EBT tokens and all this." And then as soon as the money, the extra checks started rolling in, they didn't seem to have any problem with it.' (FMR12)

Marketing challenges

Advertising for farmers' markets can contribute greatly to the success or failure of the market. In regard to SNAP, communicating the availability of SNAP to beneficiaries is a challenge, especially for markets with limited advertising budgets:

'We have zero advertising budget right now. It's all free. I guess, the biggest challenge overall, I mean for anything practically, is education and outreach for people to know that we accept EBT.' (FMR6)

'And you would be surprised – people you wouldn't even think would be on SNAP benefits really need the help and are using them but may not know the farmers' markets accept it.' (FMR9)

All SNAP-authorized market managers in the current study reported that a lack of marketing budget and advertising dollars largely impacts the use of the SNAP programme.

Gaps in SNAP programme knowledge

Gaps in SNAP programme knowledge create confusion for vendors and managers. There is a variety of products that are sold at East Tennessee farmers' markets ranging from produce to meat to crafts. The SNAP programme has strict rules and regulations regarding which products can be purchased using SNAP dollars:

'I think that [education] might be a bit of an obstacle. Just that confusion about what can be sold and what cannot be sold.' (FMR4)

'I think when you start with SNAP people are sometimes confused, the vendors are sometimes confused on, like, the SNAP money.' (FMR3)

'[An obstacle] on our vendor side [is] explaining how that [the SNAP program] works and what you can and can't use the EBT tokens for.' (FMR6)

However, if market vendors or managers are not familiar with these regulations and allow non-authorized products to be purchased with SNAP, the market can be put in jeopardy of losing SNAP privileges. Participants in the present study noted a significant gap in knowledge from both vendors and managers on the logistics and rules of the SNAP programme.

Discussion

The current study investigated why so few SNAP-authorized farmers' markets are present in rural East Tennessee. The goal of the study was to identify challenges and barriers to market-wide SNAP implementation in this region. It is among the first reports to describe local area market managers' and other key stakeholders' perspectives on limited SNAP acceptance at rural farmers' markets.

The study identified twenty-eight farmers' markets in the East Tennessee region, of which only three were SNAP-authorized. Two of the three SNAP-authorized markets were in urban areas. However, fourteen rural counties of East Tennessee had no SNAP-authorized farmers' markets despite having SNAP beneficiary populations above the national average⁽⁸⁾. These findings are consistent with those of McCracken *et al.*⁽³⁾ who reported that rural markets in Washington State were more likely to be disconnected from serving federal nutrition programme customers than markets in urban areas of the state. If farmers' markets are to be seen as viable solutions to food access issues in rural communities with high SNAP beneficiary populations, SNAP needs to be accepted as an approved form of payment.

Barriers to SNAP implementation at rural markets identified by the present study included: lack of administrative staff; limited market manager time; and inadequate knowledge regarding SNAP. These barriers are similar to findings presented by McCracken *et al.*⁽³⁾ who reported that

volunteer staff at rural markets have limited time and knowledge in various food assistance programmes. This can result in decreased market participation in such programmes.

Responses from SNAP-authorized market managers in the present study indicate two main restrictions to successful SNAP programme implementation: lack of financial resources and limited marketing opportunities and funding. These barriers are consistent with findings presented by Briggs *et al.*⁽¹⁸⁾ in their *Real Food, Real Choice* report who concluded that uneven financial capacity and limited marketing outlets were major barriers to successful SNAP programmes at farmers' markets nationwide. Without adequate staffing, funding and knowledge of SNAP programme requirements, small rural farmers' markets are placed at a great disadvantage when considering SNAP programme implementation.

Through qualitative interviews with area market managers, the present study provided new insights into additional challenges faced by small rural markets when implementing SNAP programmes. Vendor resistance and negative perceptions of SNAP customers are barriers to SNAP programme implementation at rural area farmers' markets. There is a perception that farmers' markets are designed for high-income customers who are willing to pay increased prices for fresh, local food^(18,19). This perception may translate into a message that lower-income residents are not welcome or desired. The negative vendor perceptions of SNAP beneficiaries found in our study intensify this message of 'exclusivity' among farmers' market patrons.

Interestingly, 67% of FMR from markets not accepting SNAP were concerned with prejudice and negative attitudes about SNAP from their vendors, while none of the SNAP-authorized FMR reported these concerns. This high level of concern among FMR not accepting SNAP may reflect lack of experience selling to SNAP customers, thus reflecting possible preconceived ideas about SNAP beneficiaries. Conversely, FMR who work with vendors who accept SNAP may not have as prejudicial attitudes towards SNAP customers due to first-hand experience selling to this population. Future work in this area should more fully investigate this issue and develop educational programmes to reduce prejudice among vendors.

An additional barrier that emerged from study was the cumbersome requirement of completing the farmers' market USDA FNS SNAP application. Many rural East Tennessee farmers' markets are staffed by volunteers and managed by vendors. Often, on-site manager roles can rotate season by season, market by market or are non-existent. Requiring farmers' markets to establish a sustainable point person for SNAP transactions is often not feasible for small, rural markets with a limited, uncompensated staff and a rotating market manager.

Limitations of the study

The present study had a number of limitations. First, we had a relatively small sample size. Only half of the sixteen

counties in East Tennessee responded to our invitation for participation. While we conducted interviews until thematic saturation was achieved, future studies should consider including representation from farmers' market managers in all sixteen counties. In addition, because the first author (J.R.) is a trusted in-group member, a rural farmer and vendor at local area farmers' markets, responses may suffer from social desirability bias⁽¹⁹⁾. Lastly, interviews were conducted in early spring, a busy time for farmers' market managers as they prepare for the upcoming market season. A lack of compensation for participation may have limited the number of persons willing to give up their time during this notoriously hectic time.

Strengths of the study

While addressed as a study limitation, the 'in-group' status of the first author (J.R.) should also be considered a unique strength of the study. This 'peer-to-peer' relationship granted access to the community and may have produced more honest answers from participants due to increased trust in the investigators conducting the study. Using in-depth semi-structured interviews was a source of strength for the study because it allowed for answering questions germane to the study objectives⁽¹⁵⁾. This approach facilitated open dialogue about SNAP from rural farmers' market managers, an understudied population. The managers are responsible for day-to-day operations of local area markets and provide valuable, first-hand perspectives about SNAP implementation issues existent for rural markets.

Recommendations

If SNAP implementation is to occur at rural farmers' markets in East Tennessee, three action steps are recommended. First, local health departments in coordination with the Tennessee Department of Human Services should conduct training programmes for market managers and vendors about SNAP benefits and recipients in an effort to combat the negative perceptions of SNAP documented in the study. Second, lack of education regarding the logistics of SNAP is a barrier to implementation. Local health departments, the Tennessee Department of Human Services, SNAP-authorized market managers and/or USDA representatives should conduct educational programmes for non-SNAP-authorized market managers and vendors regarding SNAP requirements and regulations. These programmes could assist local market managers and administrators with securing additional staff and setting realistic time and financial costs for SNAP implementation. Lastly, USDA FNS should consider revising its market-wide SNAP programme application. Many farmers' markets operate under larger businesses or non-profit entities. If the application allowed farmers' markets to submit a business identification number rather than an individual social security number, there may be an increase of small rural markets willing to apply.

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