Fruit and Vegetable Vouchers: One Ingredient for Increasing Produce Consumption, but not the Whole Recipe

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BACKGROUND

• It is well known that a diet rich in fresh fruits and vegetables improves health outcomes.
• In central Milwaukee, specifically the 53233 ZIP code area, there is a limited supply of vendors that sell fresh produce to its residents.
• Fondy Farmers Market is a farmers market located 1.7 miles from the Aurora Family Care Center (FCC), a family medicine clinic located within the 53233 ZIP code area.
• In an effort to promote healthy dietary habits via increased fresh produce consumption, several area clinics serving central Milwaukee have partnered with farmers markets to provide patients with “prescriptions” for fresh produce.

OBJECTIVE

To increase produce consumption among patients through a Fruit and Vegetable Prescription (FnVRx) program and to compare results with a similar study conducted the year prior.

METHODS

Recruitment:
• Patients from FCC were recruited and were screened for food insecurity using a 2-question food insecurity questionnaire in 2019. All patients presenting for a visit were eligible for participation, as opposed to only those screening positive for food insecurity in the 2018 study. A total of 107 participants were enrolled.

Food Insecurity Screening:
1. “Within the past 12 months we worried whether our food would run out before we got money to buy more.”
2. “Within the past 12 months the food we bought just didn’t last and we didn’t have money to get more.”

Intervention:
• Participants completed a baseline assessment at their initial visit and were provided with a packet of materials including:
  - Two $20 prescription vouchers for fresh produce redeemable at Fondy Farmers Market
  - Outline of study participation
  - Public transportation routes to Fondy Farmers Market
  - Information about QUEST/SNAP/WIC use at farmers markets
  - Guide on seasonality/storage of produce
  - Healthy recipes

• Participants were assigned to one of two groups based on availability of study team member
  - Group A: Participants were provided with packet of material along with verbal explanation of packet contents
  - Group B: Participants were provided with packet of material without verbal overview

• Follow-up phone surveys were completed at 4 and 8-weeks post-initial office visit

Statistical Analysis:
• Basic descriptive statistics were performed, and Fisher Exact Tests were used for 2x2 tables.

RESULTS

Demographics:
• Of the total participants (N=107):
  - 89% shared food with ≥ 2 family members
  - 86% female
  - 72% African American
  - 71% met food insecurity criteria
  - 46% had an income of <$15,000

Redemption:
• Overall, 71% never redeemed a FnVRx; a percentage almost identical to last year’s study.
• Most commonly cited reasons for not redeeming FnVRx:
  - “Too busy”
  - “Forgot”

Of those surveyed at 4 weeks post recruitment, 31% of individuals and 19% of households recalled consuming more produce, as opposed to 19% of individuals and 16% of households who had recalled more produce consumption at the 8 week survey.

• Not predictive for FnVRx redemption (all P’s ≥ 0.05):
  - Income level
  - Prior use of farmers’ markets
  - Explanation of packet contents
  - Presence of food insecurity
  - Size of household

• Positive predictive factor for FnVRx redemption:
  - Increasing age (p=0.016)

CONCLUSIONS

The solution to increasing fresh produce consumption among a patient population with limited access to this resource is multifactorial. The answer is not as simple as providing individuals with monetary-based prescriptions for local farmers markets.

Many barriers likely prevent increased produce consumption such as:
• Time
• Motivation of participants
• Transportation
• Cultural preferences
• Distance to farmers markets
• Education level of participants

Despite low redemption rates, this project identified a need for food resources for our patients and further development of interventions to meet those needs.

Acknowledgements:
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FIGURE I. FARMERS MARKET FRUIT AND VEGETABLE PRESCRIPTION FORM

FIGURE II. PRIOR USE OF FOOD ASSISTANCE

FIGURE III. PRIOR USE OF FARMERS MARKET

TABLE I. PARTICIPANTS DEMOGRAPHICS

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<th>CHARACTERISTIC</th>
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<th>PERCENTAGE</th>
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