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# Evaluation of a Community-Based Nutrition Education Program in the HAVEN Free Clinic

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#### Introduction

- The HAVEN Free Clinic is a volunteer and student-run clinic serving low-income residents of the Fair Haven community in New Haven, CT.
- The Advancing Nutrition and Dietary Outcomes (ANDO) program provides four oneon-one nutrition/lifestyle counseling sessions for patients with symptoms of prediabetes, hypertension, obesity, and other related chronic diseases. Each session is tailored to the needs of the patient.
- Potential counseling topics include: portion sizing, reading and understanding nutritional labels, effective physical activity techniques, and diets appropriate for hypertension and diabetes.

## **Evaluation Objectives**

- Assess implementation effectiveness of ANDO.
- Describe patient lifestyle behaviors, attitudes toward lifestyle change, and current knowledge.
- Assess patient perspectives and satisfaction with ANDO.

#### Methods

- A 22-item survey was distributed to ANDO patients to assess patient skills, knowledge and attitudes about healthy eating, and physical activity levels (n=10)
- Key informant interviews with patients were conducted to gauge satisfaction with the program (n=4). Patients who completed at least one ANDO module were invited to join the in-depth interview.



#### Results: Baseline Survey

# Eating patterns and physical activity behaviors (n=10):

- 40% drink whole milk
- 70% eat white bread/pasta
- 70% ate 3 large meals the day prior; 30% ate 2 large meals the day prior
- 40% had <30min physical activity in the last week

# Attitudes towards healthy eating and lifestyle changes (n=8):

- 88% reported avoiding highfat, high-salt, and high-sugar foods
- 63% reported that they consider nutrition labels when purchasing foods
- 100% felt confident in their ability to prepare healthy meals at home, while 88% felt confident in their ability to prepare healthy meals to go

#### Results: Patient In-Depth Interviews (n=4)

#### Reasons for joining ANDO:

• Motivation to make lifestyle changes based on family experiences and personal goals

#### Satisfaction with ANDO:

• Access to learning material "I did not eat healthy food. I did not know which food is healthy. Now, I

have normal weight and not only do I know about healthy food but I also eat healthy food."

- Ability to share information with family "When I cook, I cook more healthy food and my family is supportive"
- Counselors encourage patients to make positive life changes "(I) experienced an improvement in (my) self-esteem, (I'm) feeling better with (my)self."

#### Challenges for patients:

- Adjusting to lifestyle changes in general "Sometimes I ate at 1, 2, 3 am (e.g. Cheerios) and that was not healthy. It is still challenging to resist to certain snacks such as chocolate, especially when I am hungry or have a desire for it"
- Time management for food preparation
- Adjusting to American diet/lifestyle "The big problem is the change you experience as an immigrant coming from Mexico...Food is different, here you have to work a lot at
  - (preparing) meals, you don't have time to eat properly"

#### Suggestions for consideration:

- To have the same counselor at every visit
- Organize community events (i.e. 5ks or walk-a-thons) to motivate people and children
- Group discussion sessions to facilitate learning

# Knowledge on lifestyle and disease outcome (n=8):

- Only 25% correctly stated that 150 min of moderate-intensity exercise is recommended by the Physical Activity Guidelines for Americans
- When asked which of the following are risk factors for diabetes:

88% said family history
75% said poor diet
25% said genetics
13% said physcial inactivity
• When asked which of the following are high in saturated fat:
88% said cheese
75% said beef
63% said ice cream
38% said potatoes
25% said corn
13% said nuts
13% said beans



<sup>&</sup>quot;My brother, who was like a father to me, died. He always ate what he wanted, so I realized that I needed to take care of my health"

#### Discussion

- Participants reported strong motivation to make lifestyle changes, encouraged by ANDO counselors.
- There was a gap in knowledge in the association between lifestyle choices and diabetes outcome, and in nutritional content of various foods. Other knowledge gaps are worth exploring, as this information could be useful when designing curriculum.
- Patients like the one-on-one counseling design, and the relationship between patient and counselor seems to help motivate patients to make lifestyle changes.
- Although the one-on-one counseling design is the crux of the ANDO program, as sessions can be tailored to each patient, the variability between counselors makes a formal evaluation of patient outcomes difficult. HAVEN could consider standardizing the counseling sessions while keeping them grounded in motivational interviewing. Designing an intervention manual may help with this standardization.
- HAVEN could explore incorporating group sessions/discussions, or organizing community events to promote physical activity.

#### Limitations

- Due to the small sample size, this is meant to be exploratory and can serve as a pilot for better tool modification.
- There were a number of instances when participants chose not to answer survey questions, especially regarding knowledge-based questions.



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- \* "The HAVEN Free Clinic is a student-run primary care clinic partnered with Fair Haven Community Health Center (FHCHC) and Yale University." For more information please visit http://www.havenfreeclinic.org/hfc/